ICF-CD553RM

SERVICE MANUAL

US Model

Ver. 1.2 2005.10

Model Name Using Similar Mechanism	ZS-D10
Optical Pick-up Block Name	KSM-900AAA
Optical Pick-up Name	KSS-900A

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION
With 6–ohm loads, both channels driven from 100 – 10 000 Hz; rated 1.4 W per channel-minimum RMS power, with no more than 10 % total harmonic distortion in AC operation.

CD player section

System: Compact disc digital audio system
Laser diode properties: Material: GaAlAs
Wavelength: 780 nm
Emission duration: Continuous
Laser output: Less than 44.6 µW
(This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)
Frequency response: 20 – 20 000 Hz $^{+1}_{-1.5}$dB
Wow and flutter: Below measurable limit

Radio section

Frequency range:

TV:	2 – 13 ch
WEATHER:	1 – 7 ch
FM:	87.5 – 108 MHz
AM:	530 – 1 710 kHz

General

Time display: 12-hour system
Speaker: 77 mm (3 1/8 inches) dia, 6 Ω
Power outputs:
1.8 W + 1.8 W (at 10% harmonic distortion)
Power requirements: 120 V AC, 60 Hz
Dimensions:
Approx. 400 × 84 × 323 mm (w/h/d)
(Approx. 15 3/4 × 3 3/8 × 12 3/4 inches) incl. projecting parts and controls
Mass: Approx. 3 kg (7 lb)

Supplied accessories:
Mounting screws (4), Template (1), Spacers (4), Remote commander (1)

Design and specifications are subject to change without notice.

TV/WEATHER/FM/AM CD KITCHEN CLOCK RADIO

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2005J05-1
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Personal Audio Group
Published by Sony Engineering Corporation

SONY®

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage.
Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

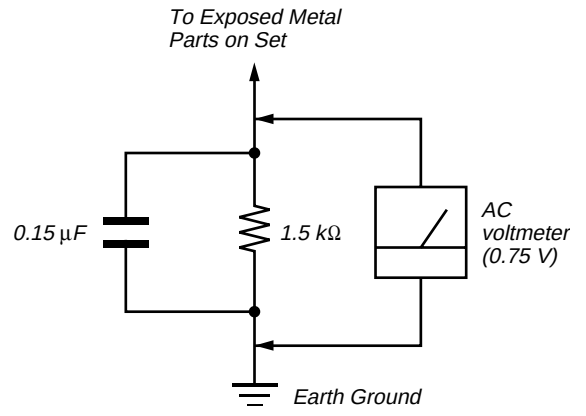

Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

About CD-Rs/CD-RWs
This unit is compatible with CD-Rs/CD-RWs but playback capability may vary depending on the quality of the disc, the recording device and application software.

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NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

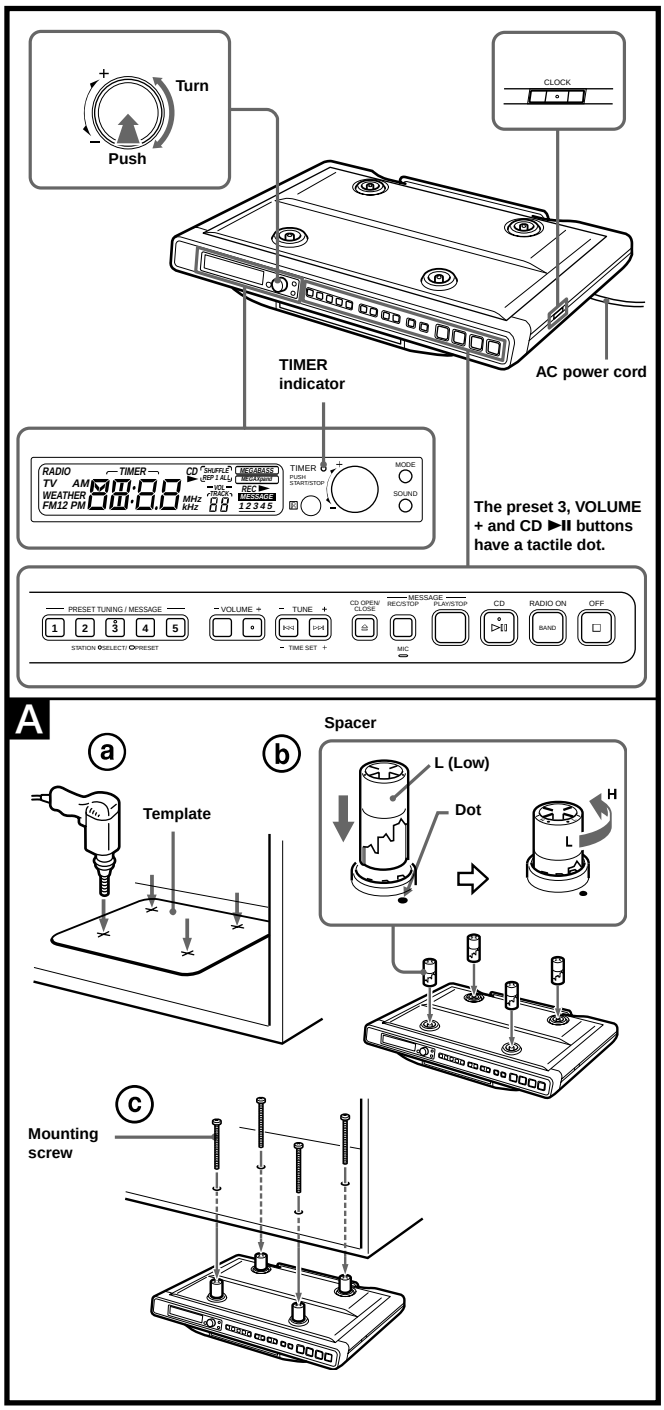
: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 °C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscou-s (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

SECTION 2
GENERAL

This section is extracted from instruction manual.



Features

- Super Slim Interior Oriented Design
- Voice Memo Function
- MEGA Xpand function to get the effect of expansion of the sound field
- TV/WEATHER/FM/AM Digital Tuner
- Easy Set, One Touch cooking timer
- Magnetic Remote Commander

Installing the Unit Under a Cabinet

(See Fig. A)

The unit can be installed without the spacer.

1. Mark the position of the 4 holes by using the supplied template. Use a drill to make the holes (size 6.5 mm dia., $^{9}/_{32}$ inch). (See Fig. A-ⓐ)
2. If the cabinet door overhangs the shelf and obstructs the unit, you can adjust the unit/shelf height.
   First set the L mark to the dot which becomes the lowest position, then you can adjust the height in 4 steps (H••L)by turning the spacer counterclockwise. (See Fig. A-ⓑ)
3. Install the unit with the supplied mounting screws. (See Fig. A-ⓒ)

Caution

- Since the unit is very heavy, be careful when installing the unit.
- Hold the unit horizontally when installing it, since the CD tray may open if the unit is shaken.
- To reduce the risk of fire, do not place any heating or cooking appliance beneath this unit.
- Install the unit so that its AC power cord can be connected directly to a wall outlet. Do not use a converter or extension cord.
- Be sure that the AC power cord has no slack when using the unit, since the cord acts as an FM wire antenna. If the AC power cord has some slack, wind it up to the cord hook until the cord has no slack.
- The unit has a built-in ferrite bar antenna for AM radio reception. Check the condition of AM reception before fixing in position.
- Install the unit as far as possible from a source of noise (for example, refrigerator, microwave oven, fluorescent lamp, etc.).

Setting the Clock

1. Plug in the CD kitchen clock radio.
   The display will flash “AM 12:00”.
2. Press **CLOCK** for a few seconds.
   You will hear a beep and the hour will start to flash in the display.

3. Press **TUNE•TIME SET +** or – until the correct hour appears in the display.
4. Press **CLOCK** once.
   The minutes will flash.

5. Repeat steps **3** and **4** to set the minutes.
   After setting the minutes, press **CLOCK** to start the counting of the seconds, and you will hear two short beeps.

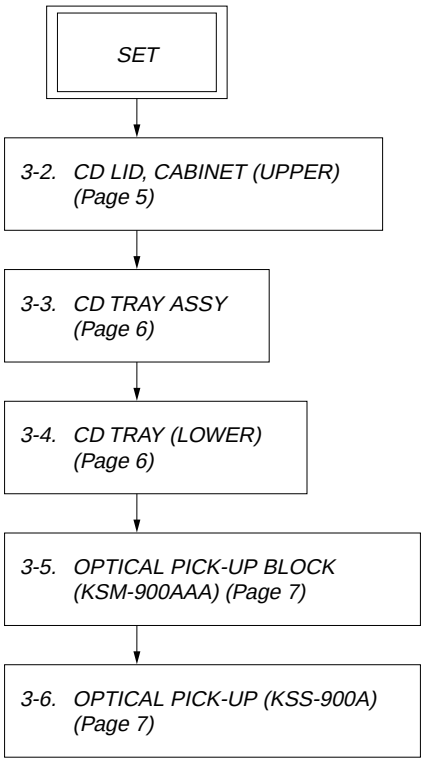
To set the current time quickly, hold down **TUNE•TIME SET +** or –.
12-hour system: “AM 12:00” = midnight

In step **5**, when you press **CLOCK** after the minute setting to activate the clock, the seconds start counting from zero.

SECTION 3
DISASSEMBLY

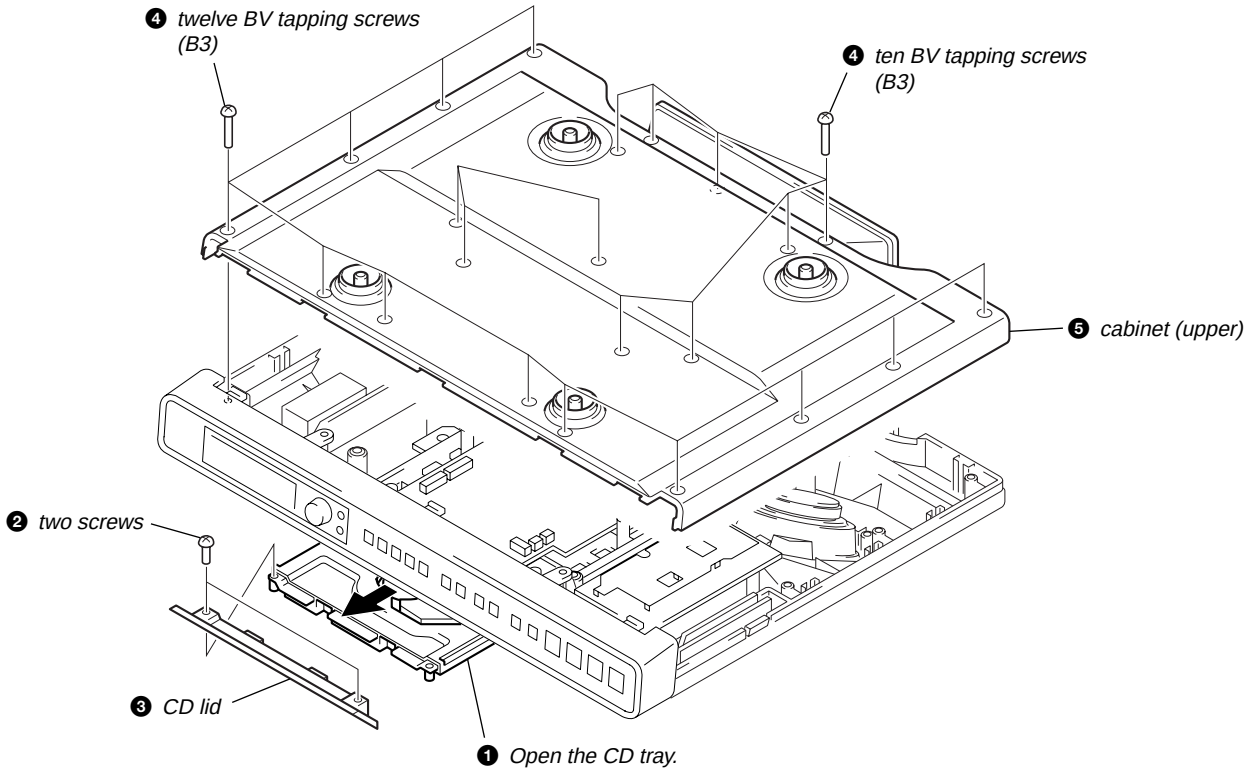
• This set can be disassembled in the order shown below.

3-1. DISASSEMBLY FLOW

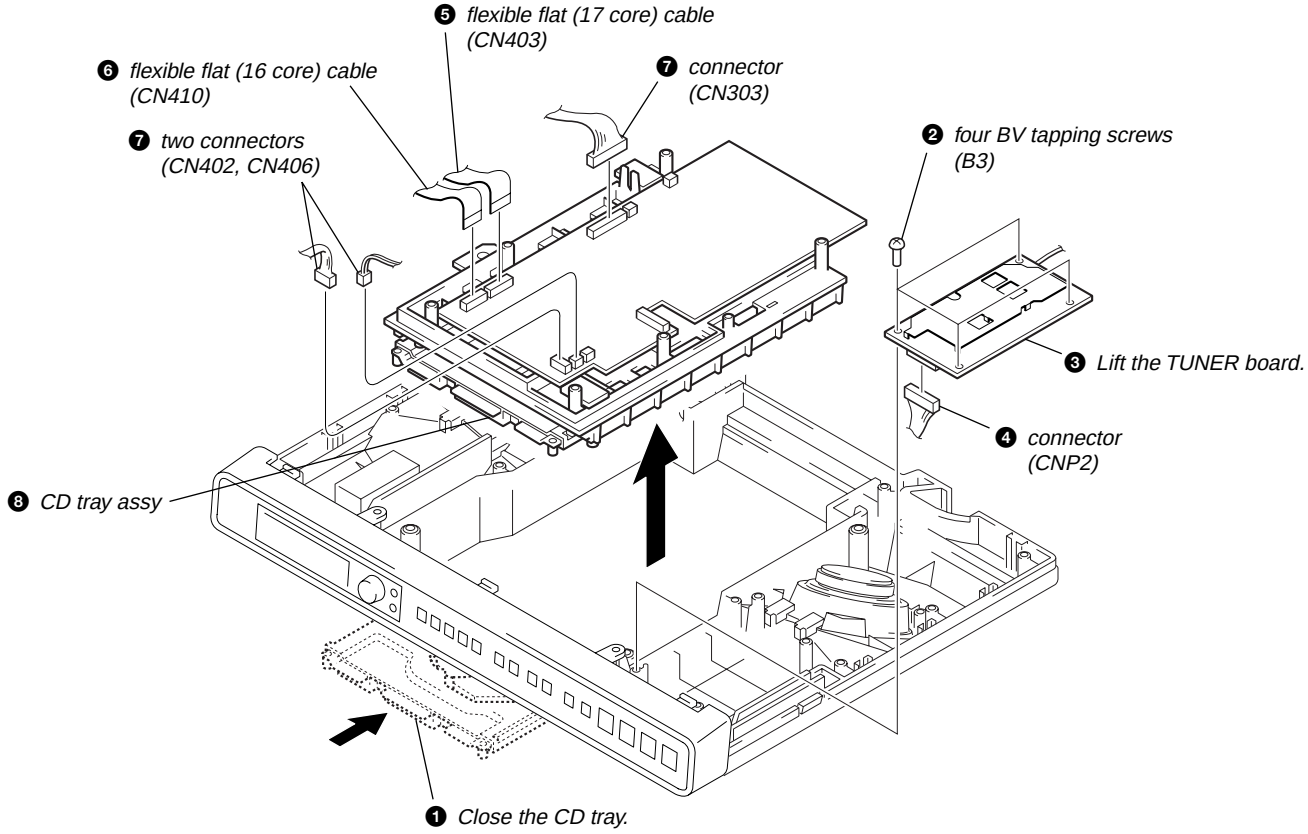

SET
3-2. CD LID, CABINET (UPPER) (Page 5)
3-3. CD TRAY ASSY (Page 6)
3-4. CD TRAY (LOWER) (Page 6)
3-5. OPTICAL PICK-UP BLOCK (KSM-900AAA) (Page 7)
3-6. OPTICAL PICK-UP (KSS-900A) (Page 7)

Note: Follow the disassembly procedure in the numerical order given.

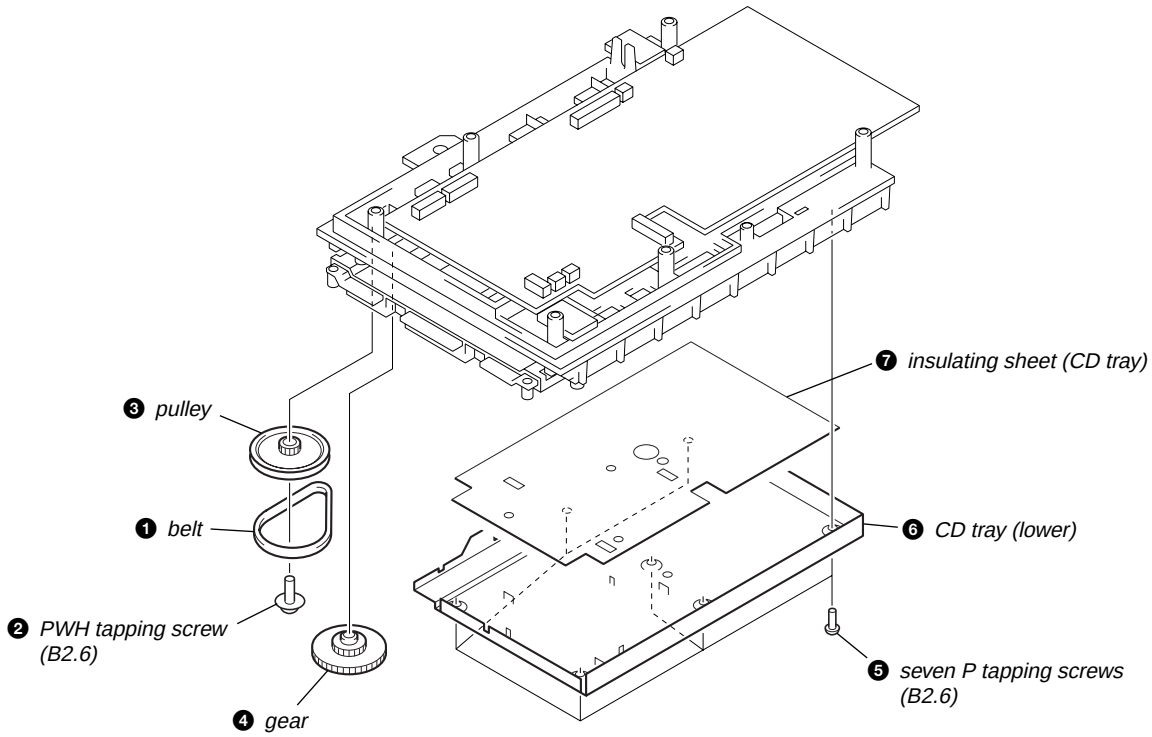
3-2. CD LID, CABINET (UPPER)



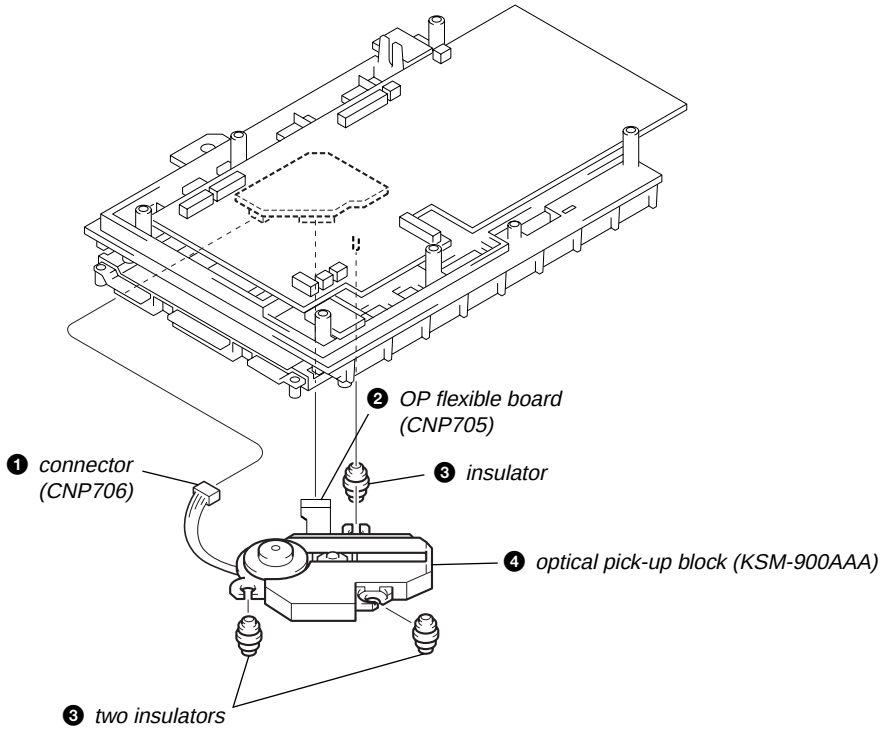
3-3. CD TRAY ASSY


❺ flexible flat (17 core) cable (CN403)
❻ flexible flat (16 core) cable (CN410)
❼ connector (CN303)
❼ two connectors (CN402, CN406)
❷ four BV tapping screws (B3)
❸ Lift the TUNER board.
❹ connector (CNP2)
❽ CD tray assy
❶ Close the CD tray.

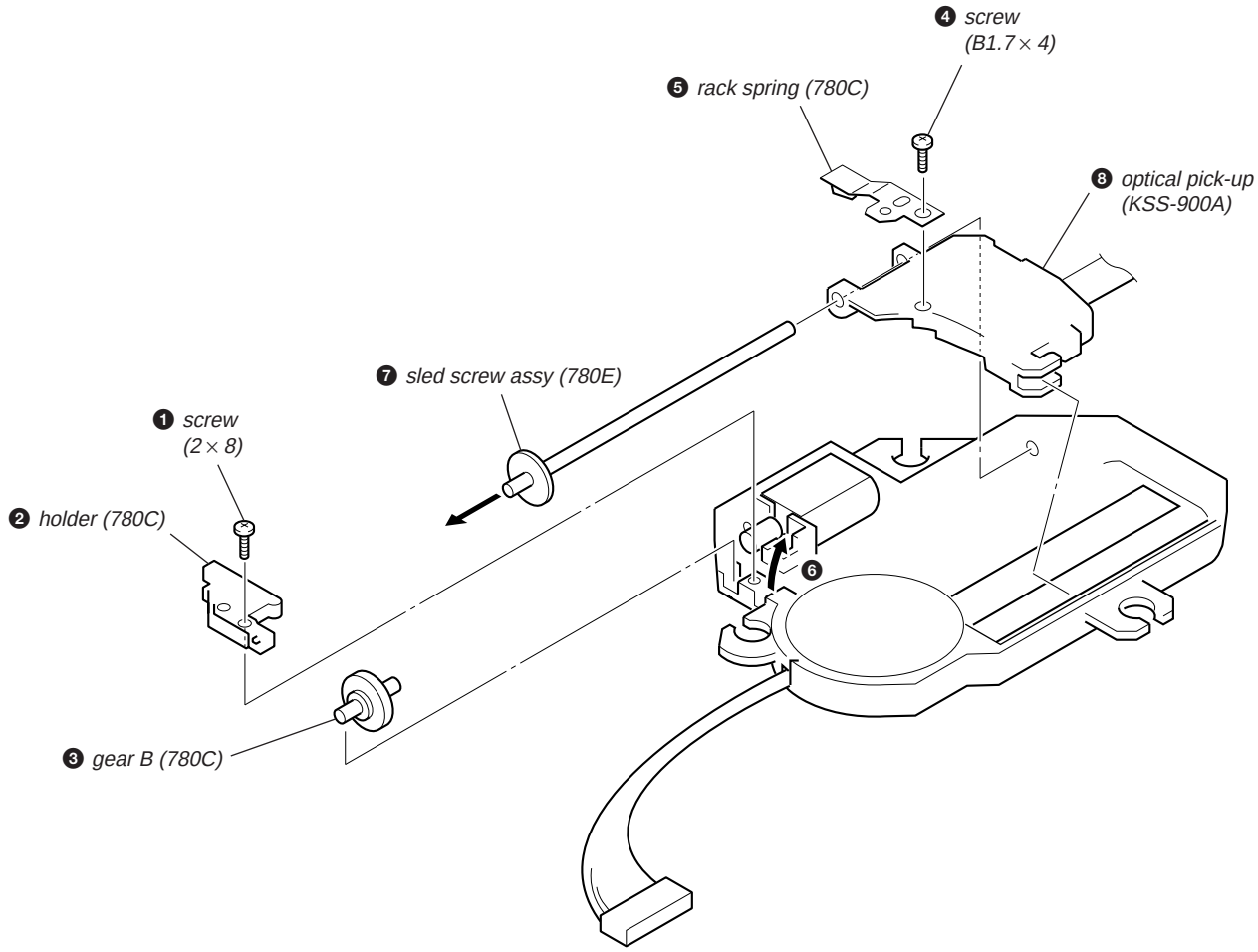
3-4. CD TRAY (LOWER)



3-5. OPTICAL PICK-UP BLOCK (KSM-900AAA)



3-6. OPTICAL PICK-UP (KSS-900A)



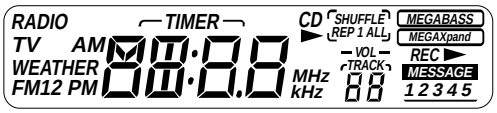
SECTION 4
TEST MODE

LCD TEST MODE

Procedure:

1. Turn the power ON while pressing simultaneously three keys of [2], [VOLUME –] and [REC/STOP].
2. The microprocessor version will be displayed on the LCD.
3. Press the [⏏] key. The LCD display will become as follows.

LCD display



4. The display corresponding to a key is turned off, if a key on the set is pressed.

Key Corresponding Table

Key	Segment
CLOCK	AM, PM, : (colon),
TIMER	⌜ TIMER ⌝, TIMER LED
1	1a, 1d, 1e, 1f, 1g
2	2c, 2f
3	3e, 3f
4	4a, 4d, 4e
5	5b, 5e
VOLUME –	– VOL –
VOLUME +	. (dot), MHz, kHz, CH
⏮	6b
⏭	6a, 6c, 6d, 6e, 6f, 6g
BAND	RADIO, WEATHER, TV, FM1, FM2
☐	1b, 1c, 2a, 2b, 2d, 2e, 2g, 3a, 3b, 3c, 3d, 3g, 4b, 4c, 4f, 4g, 5a, 5c, 5d, 5f, 5g
▷II	CD, ⌜ TRACK ⌝, ▷
MODE	↻ ↻ , SHUFFLE, REP, 1, ALL
REC/STOP	REC, MESSAGE, MB number underline
PLAY/MODE	1, 2, 3, 4, 5, ►
SOUND	MEGA BASS, MEGA EXPAND

5. After all keys on the set were pressed, press the [⏏] key, and the test mode will be released.

CD TEST MODE

Procedure:

1. Connect 120 kΩ and 47 kΩ resistors in parallel to the TP603 on the SIDE-KEY board, and short another end of resistors to the GND, and the CD TEST MODE will be activated.
2. Insert a CD disc.
3. Turn the power ON. Press the [▷II] key.
4. The following shows the state transition table for each key operation in respective sub modes of CD TEST MODE.

State Transition Table

If each key is pressed in respective sub modes, the mode will transit to the sub modes listed in table.

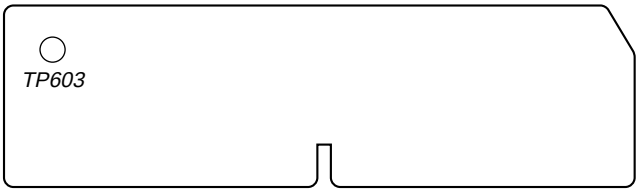
Mode		Description	LCD	Key								
Main	Sub			□	▷II	▶▶I	I◀◀	BAND	PLAY/STOP	▶▶I (Long pressed)	I◀◀ (Long pressed)	Processing end
INT		State when TEST MODE is activated.	0	STOP0	FOCUS0							
STOP	STOP0	State when [□] key is pressed once from initial state.	1		FOCUS0	SLDR	SLDF	EF	Normal			
	STOP0	Automatically adjusted value is held.	2	STOP0	FOCUS0	SLDR	SLDF		Normal			
FOCUS	FOCUS0	Auto focus transfer mode	3	STOP								FOCUS
	FOCUS	Focus servo ON state.(CLV-S, tracking/sled, servo OFF) It will be referred to as LPC ON if focus carries out on.	4	STOP	F.LPC OFF	FCSR	FCSF	EF	AUTO			
	F.LPC OFF	LPC OFF in focus state.	5	STOP	ALSV	FCSR	FCSF	SCURVE				
ALL SERVO	ALSV	State where all servo systems are turned ON.	7	STOP	ALPC OFF	FCSR	FCSF	EF	AUTO			
	ALPC OFF	State where all servo systems are turned ON.(LPC OFF)	8	STOP	TGUP	FCSR	FCSF					
	TGUP	State with tracking gain up in all servo systems are turned ON.(LPC ON)	9	STOP	ALSV	FCSR	FCSF					
	AUTO	Mode in which automatic adjustment is made at once.	b									
SLED	SLDF	Sled is fed outward in stop state.	c	STOP	STOP	STOP		STOP	STOP		SLDF	
	SLDR	Sled is fed inward in stop state.	d	STOP	STOP		STOP	STOP	STOP	SLDR		
F.SLED	FCSF	Sled is fed outward in focus state.	E	FOCUS	FOCUS	FOCUS		FOCUS	FOCUS		FCSF	
	FCSR	Sled is fed inward in focus state.	F	FOCUS	FOCUS		FOCUS	FOCUS	FOCUS	FCSR		

Mode transits to sub modes listed in table, if a key is pressed in respective sub modes.

5. Turn the power OFF to release the CD TEST MODE.

Connecting Location:

– SIDE-KEY BOARD (Conductor Side) –



CD-JUMP TEST MODE

Procedure:

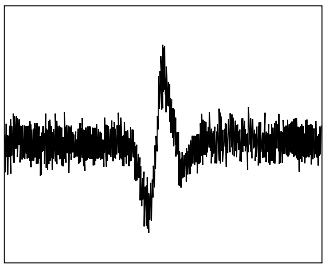
1. Connect the oscilloscope to TP (TE) and TP (VREF) on the CD board.
   Connecting Location: CD board (See page 13)
2. Connect 270 kΩ and 47 kΩ resistors in parallel to the end of TP603 on the SIDE-KEY board, and short another end of resistors to the GND, and the CD-JUMP TEST MODE will be activated.
3. Insert a CD disc.
4. Turn the power ON. Press the [▷II] key.
5 . If the [MODE] key is pressed, you can jump in fast feed or fast reverse direction with the [▶▶I] or [I◀◀] key by the jump amount set in Table 1.

Table 1

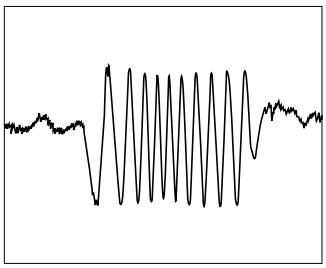
LCD	Key	
	▶▶I	I◀◀
REP ALL	TRACK + 1	TRACK - 1
SHUFFLE	TRACK + 10	TRACK - 10
SHUFFLE, REP	TRACK + 100	TRACK - 100

Waveform of TP (TE) and TP (VREF) output in each mode is as follows.

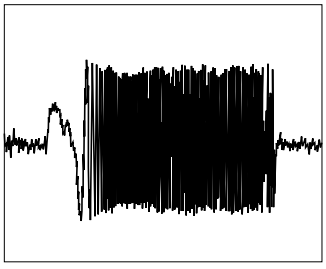
REPEAT – ALL mode
500 µs/div



SHUFFLE mode
1 ms/div



SHUFFLE – REPEAT mode
10 ms/div

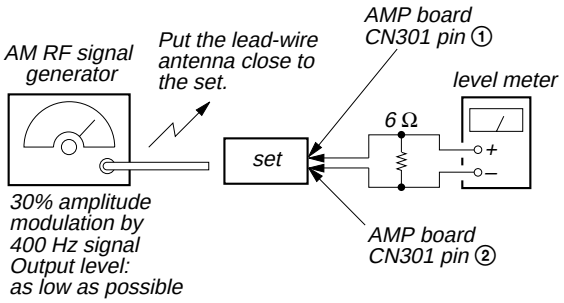


6. Turn the power OFF to release the CD-JUMP TEST MODE.

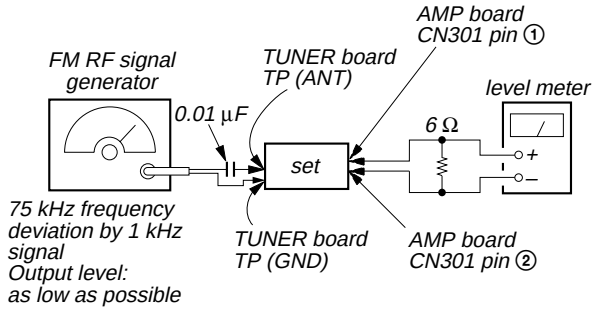
SECTION 5
ELECTRICAL ADJUSTMENTS

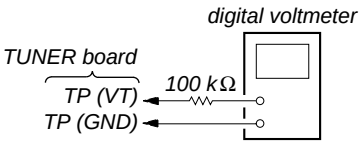
TUNER SECTION | 0 dB=1 μV

[AM]
Setting:
Function: RADIO
Band: AM



[FM/TV/WEATHER]
Setting:
Function: RADIO
Band: FM/TV/WEATHER





- Repeat the procedures in each adjustment several times, and the tracking adjustments should be finally done by the trimmer capacitors.

AM IF ADJUSTMENT	
Adjust for a maximum reading on level meter	
T1	450 kHz

AM VCO VOLTAGE ADJUSTMENT		
Adjustment Part	Frequency Display	Reading on Digital Voltmeter
L6	530 kHz	1.0 ± 0.05 V
Confirmation	1,710 kHz	5.3 ± 0.7 V

AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter	
L5	580 kHz
CT5	1,490 kHz

FM/TV/WEATHER IF ADJUSTMENT	
Adjust for a minimum reading on level meter	
T2	10.7 MHz

FM/TV (2 – 6 CH) VCO VOLTAGE ADJUSTMENT		
Adjustment Part	Frequency Display	Reading on Digital Voltmeter
L4	TV 2 ch	0.55 ± 0.15 V
CT3	108 MHz	4.5 ± 0.15 V

FM/TV (2 – 6 CH) TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter	
L2	TV 2 ch
Confirmation	108 MHz

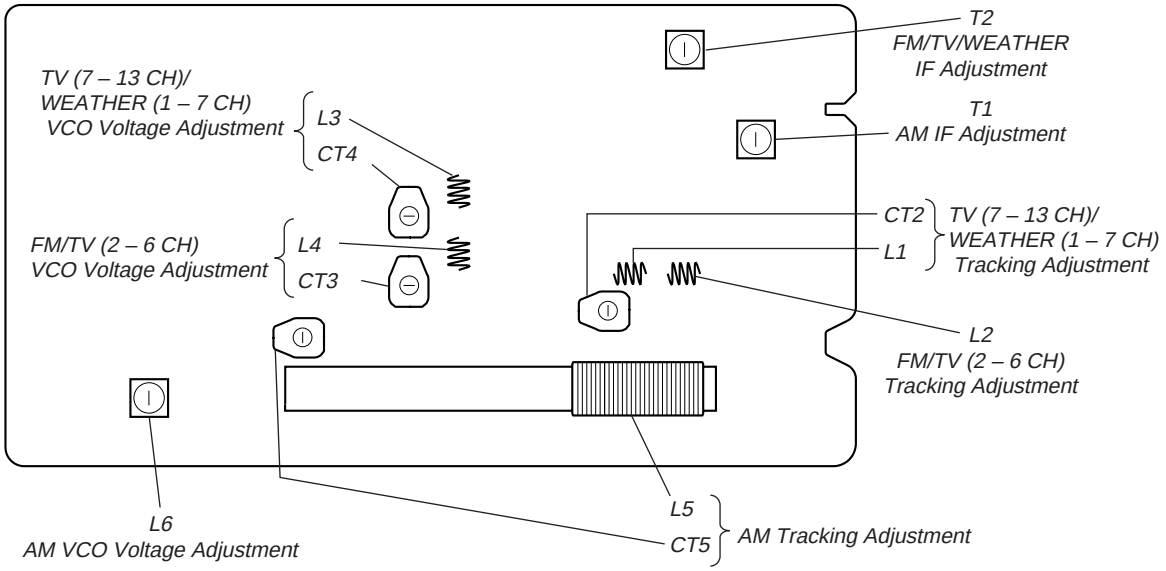
TV (7 – 13 CH)/WEATHER (1 – 7 CH) VCO VOLTAGE ADJUSTMENT		
Adjustment Part	Frequency Display	Reading on Digital Voltmeter
L3	WEATHER 2 ch	1.2 ± 0.15 V
CT4	TV 13 ch	4.1 ± 0.15 V

TV (7 – 13 CH)/WEATHER (1 – 7 CH) TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter	
L1	WEATHER 2 ch
CT2	TV 13 ch

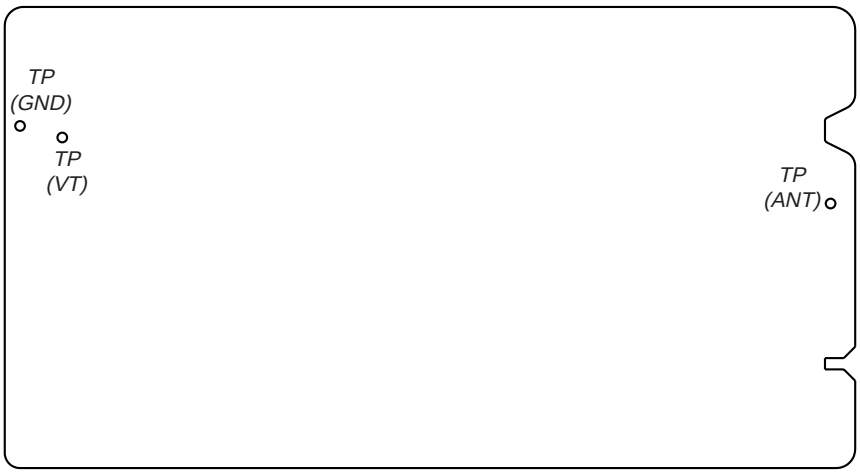
Adjustment and Connecting Location: TUNER board
(See page 12)

Adjustment and Connecting Location:

– TUNER BOARD (Component Side) –



– TUNER BOARD (Conductor Side) –



CD SECTION

Perform all CD section check in the test mode.

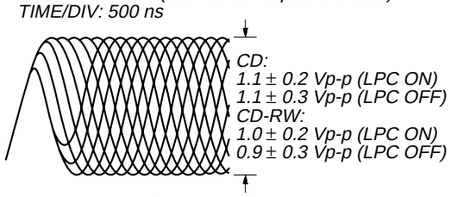
FOCUS BIAS CHECK

Procedure:

1. Connect the oscilloscope to TP (RF) and TP (VREF) on the CD board.
2. Set the CD TEST MODE. (Refer to CD TEST MODE (See page 9))
3. Insert the test disc (YEDS-18). (Part No. 3-702-101-01) (CD)
4. Press the [▷II] key. (LPC ON)
5. Confirm that the oscilloscope waveform is as shown in the figure below. (eye pattern)
   A good eye pattern means that the diamond shape (◊) in the center of the waveform can be clearly distinguished.
6. Press the [▷II] key. (LPC OFF)
7. Perform confirmation in the same manner as step 5.
8. Press the [□] key.
9. Change the test disc (TCD-W082L). (Part No. J-2502-063-2) (CD-RW)
10. Perform confirmation in the same manner as step 4 to 7.

• RF signal reference waveform (eye pattern)

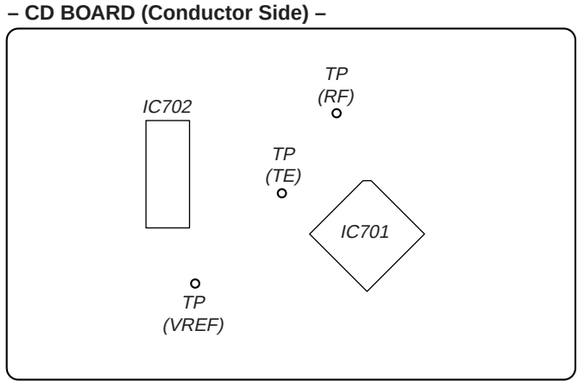
VOLT/DIV: 0.2 V (with the 10: 1 probe in use.)
TIME/DIV: 500 ns



When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensitivity.

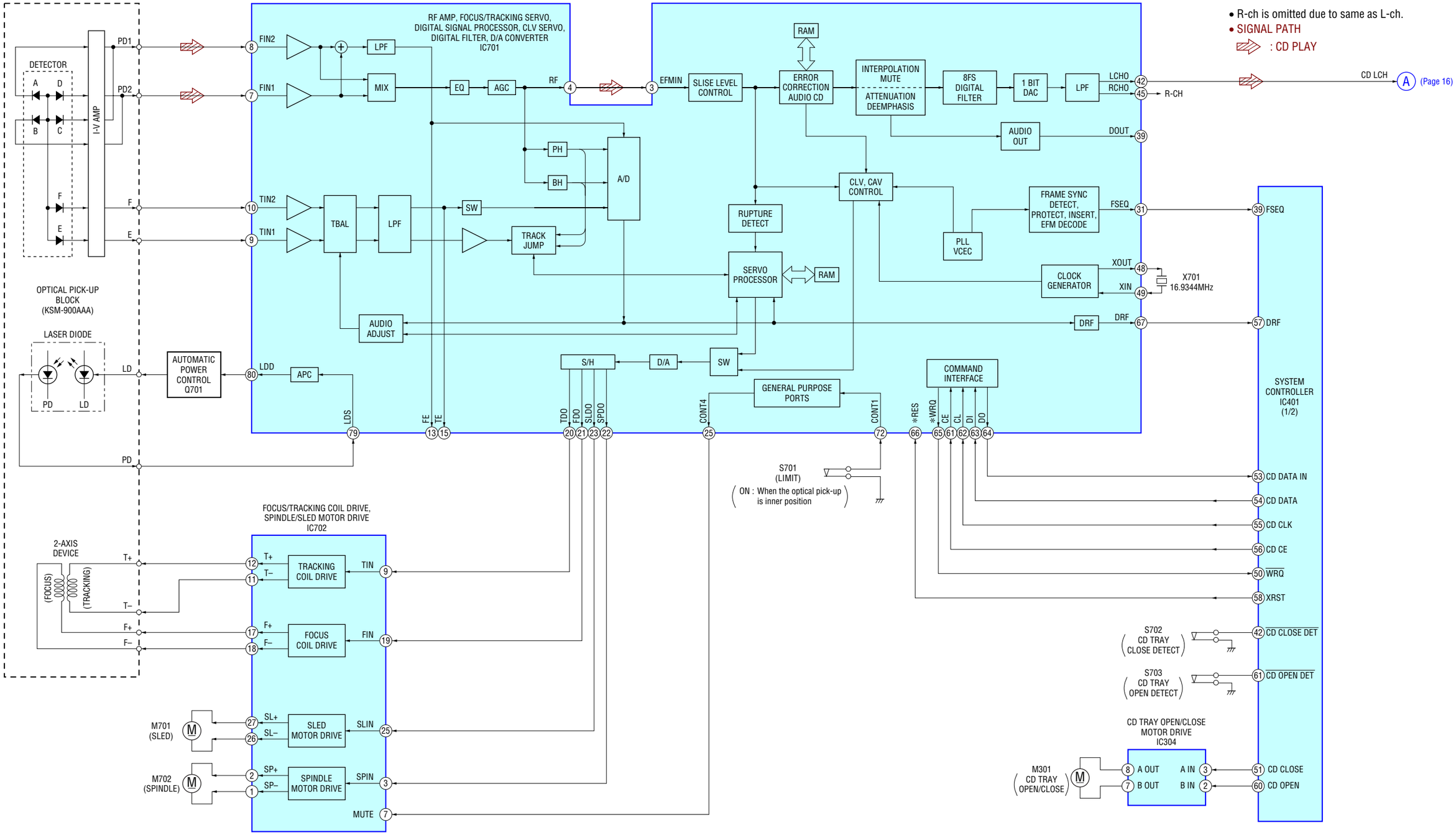
Connecting Location:

– CD BOARD (Conductor Side) –

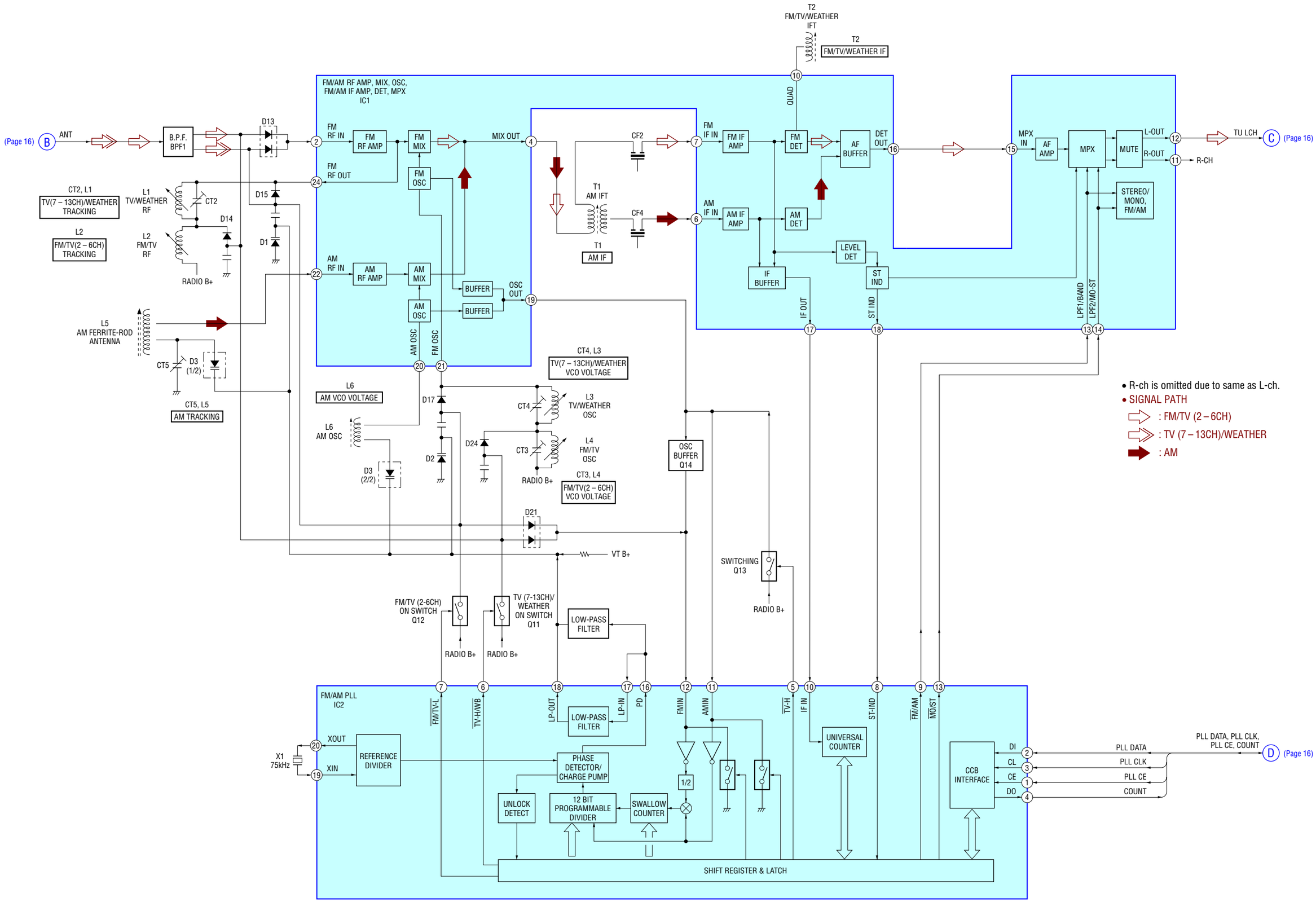


SECTION 6
DIAGRAMS

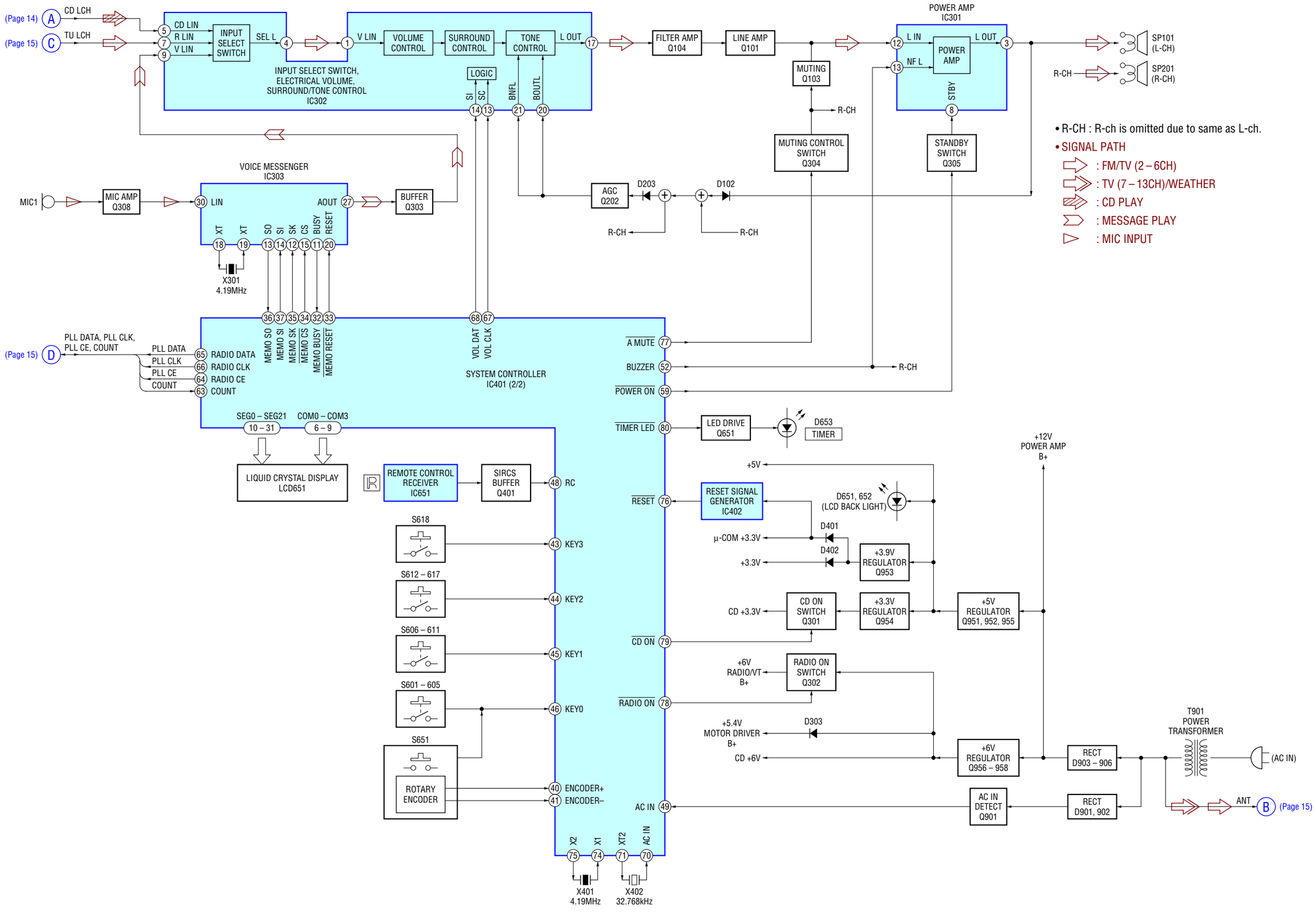
6-1. BLOCK DIAGRAM – CD Section –



6-2. BLOCK DIAGRAM – TUNER Section –



6-3. BLOCK DIAGRAM – MAIN Section –



6-4. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Printed Wiring Boards:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ⊡← : indicates side identified with part number.
- △ : internal component.
- ▬ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

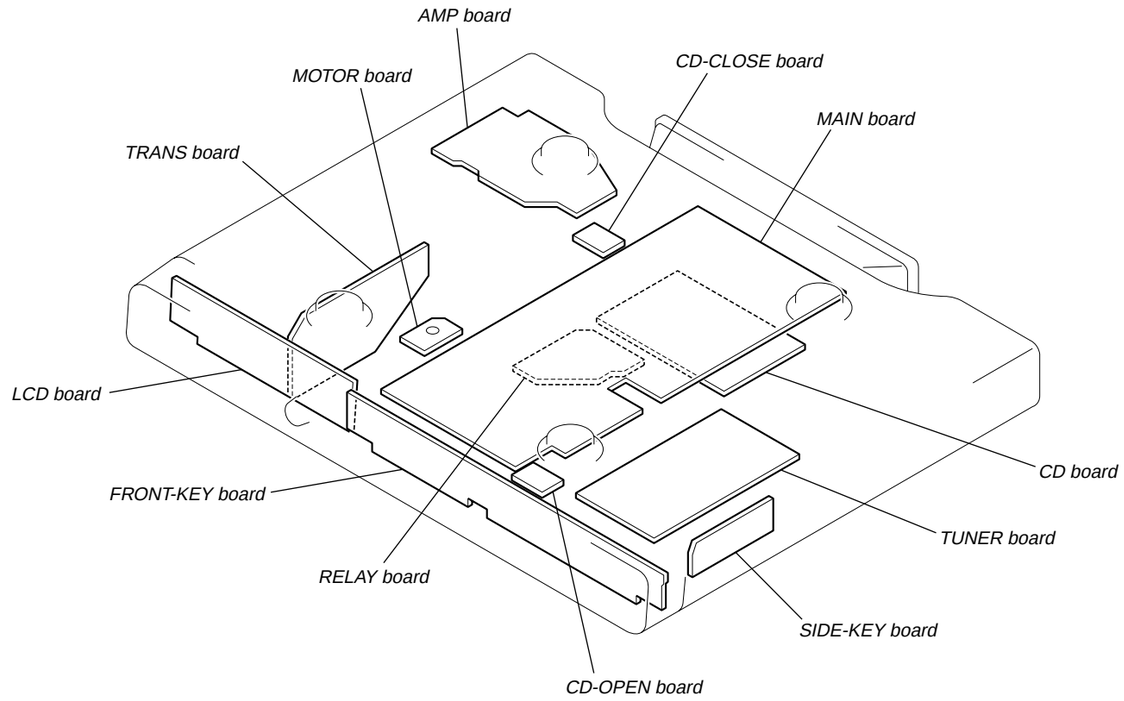
Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- ▬ : B+ Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM/TV (2 – 6 ch)
  ( ) : AM
  ⟨⟨ ⟩⟩ : TV (7 – 13 ch)/WEATHER (1 – 7 ch)
  [ ] : CD PLAY
  { } : MESSAGE REC/PLAY
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM/TV (2 – 6 ch)
  ⇨ : TV (7 – 13 ch)/WEATHER (1 – 7 ch)
  ➡ : AM
  ⇨ : CD PLAY
  ⇨ : MESSAGE PLAY
  ▷ : MIC INPUT

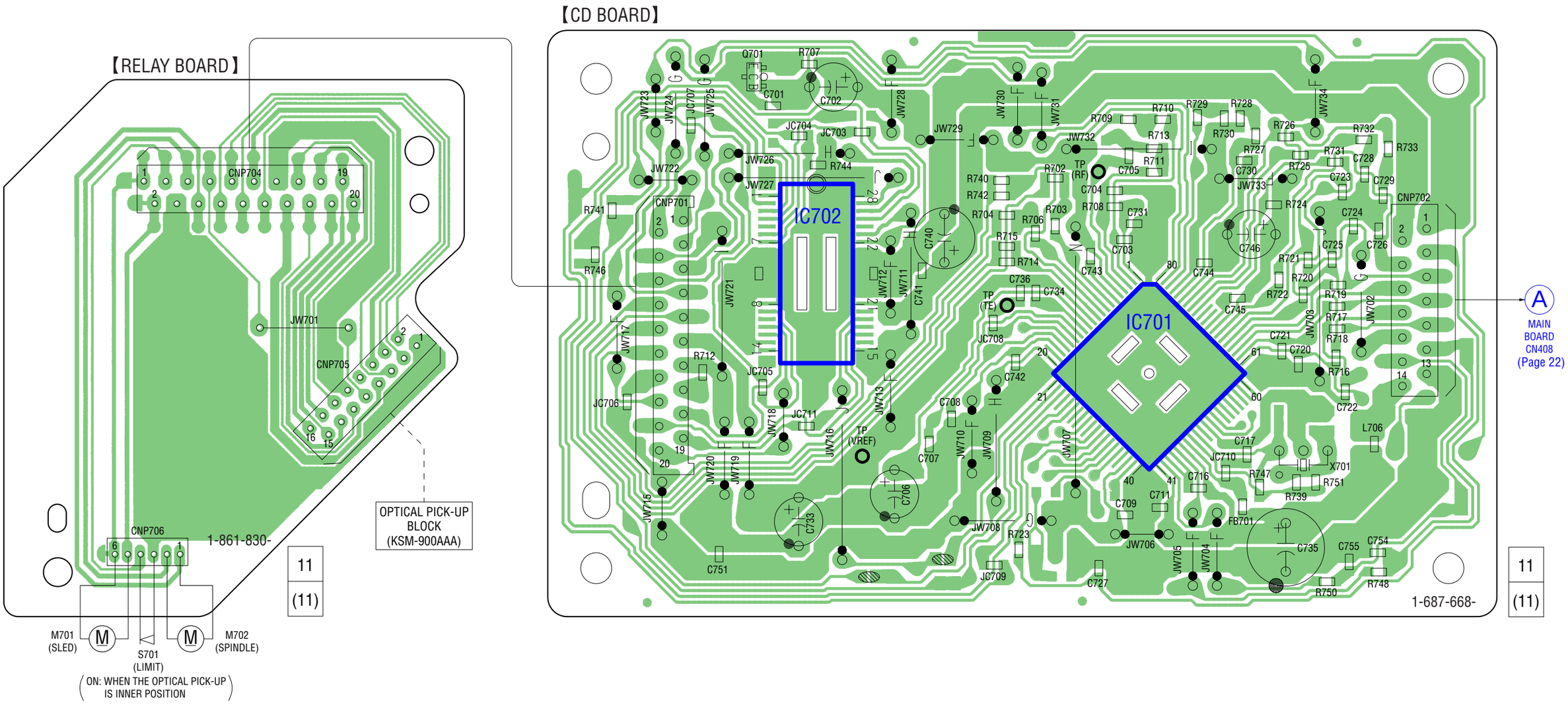
- **Circuit Boards Location**

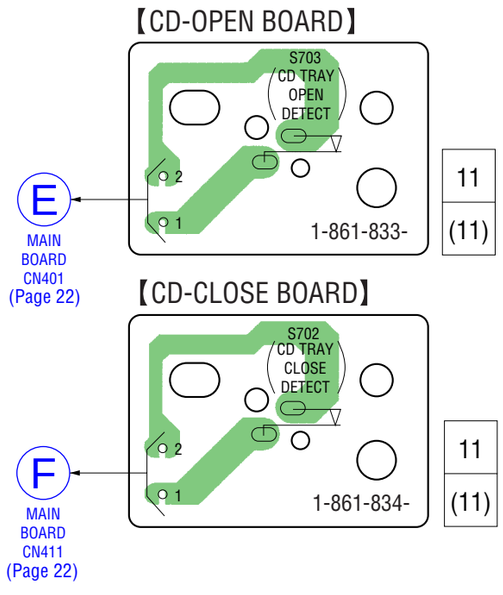


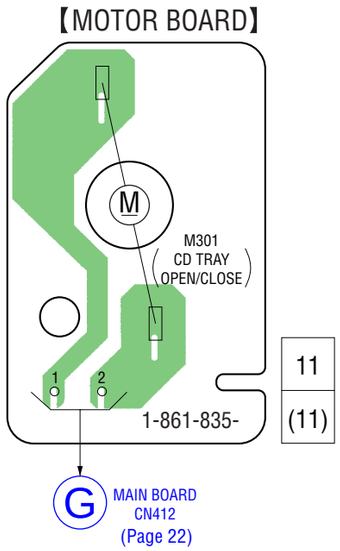
6-5. PRINTED WIRING BOARDS – CD Section –

• See page 17 for Circuit Boards Location.

:Uses unleaded solder.

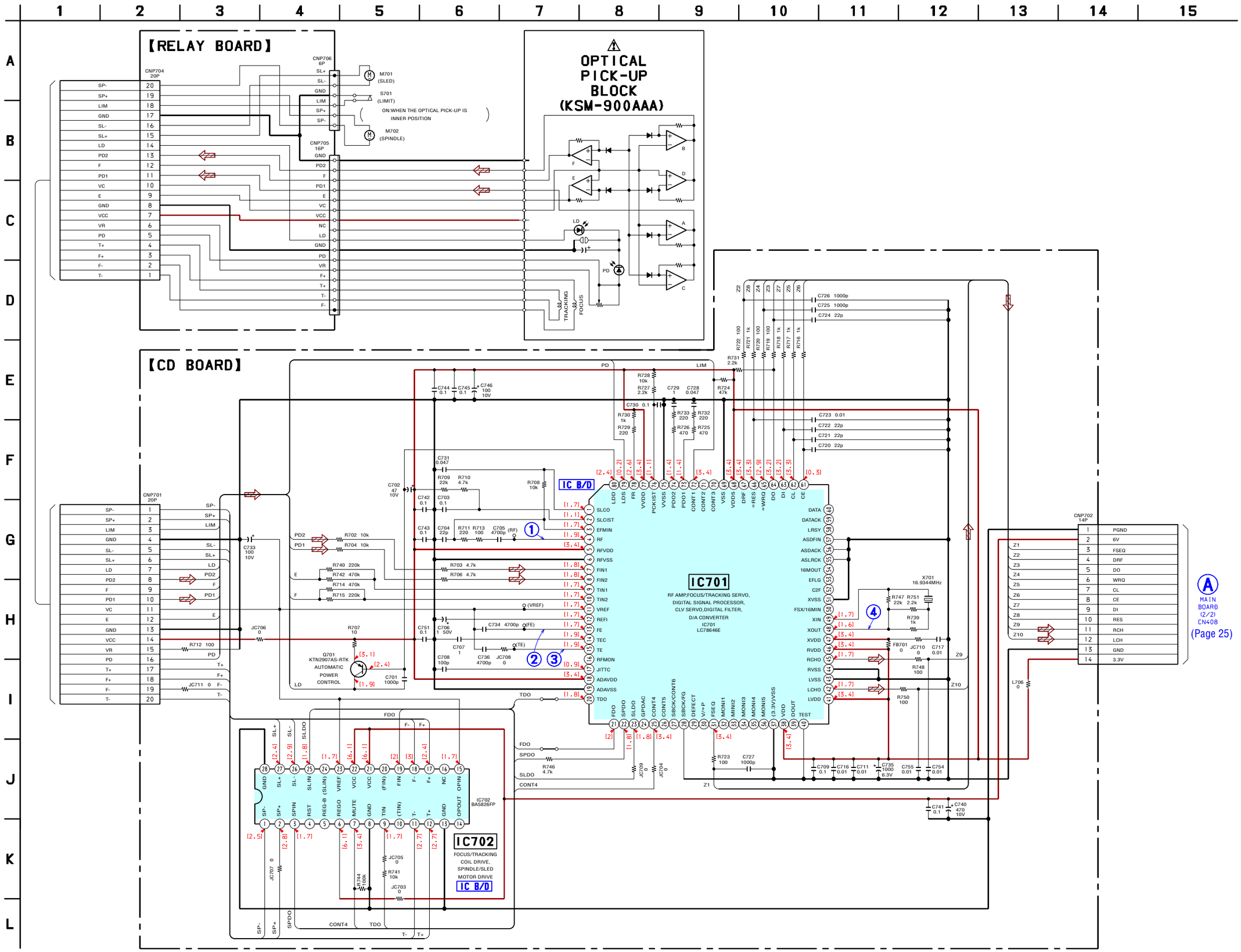






6-6. SCHEMATIC DIAGRAM – CD Section –

• See page 28 for Waveforms. • See page 28 for IC Block Diagrams.



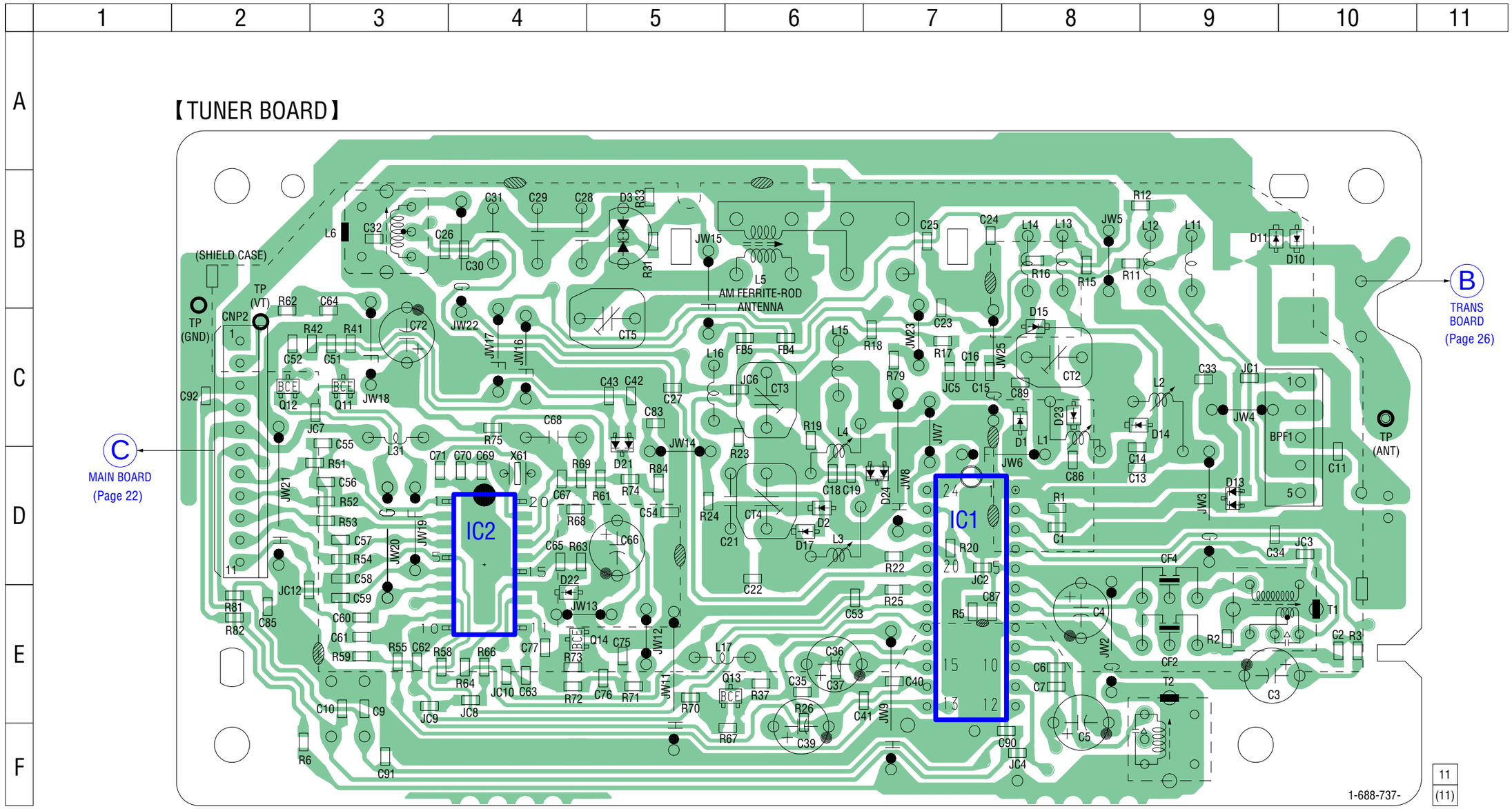
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

6-7. PRINTED WIRING BOARD – TUNER Section –

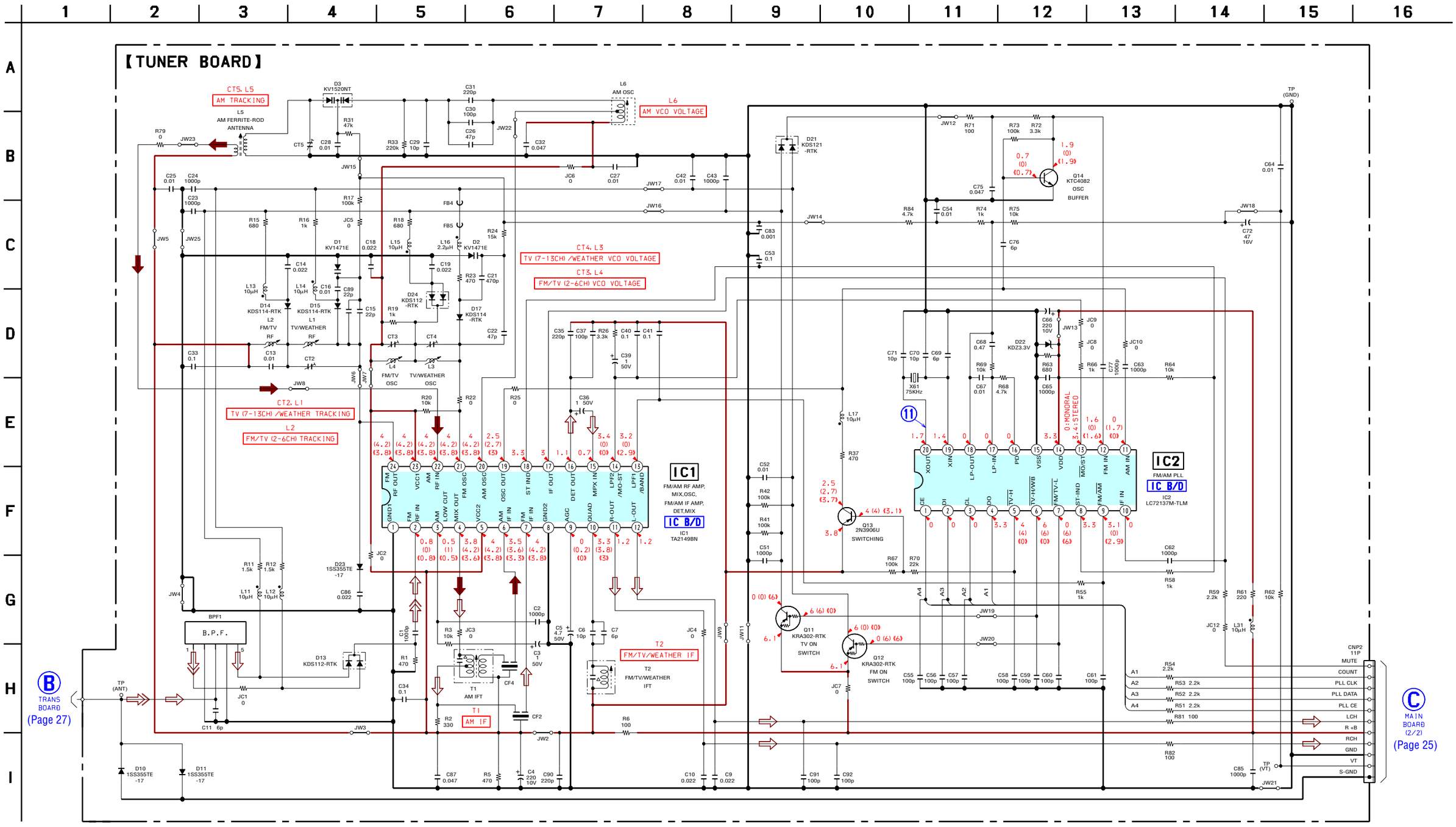
• See page 17 for Circuit Boards Location. :Uses unleaded solder.

- **Semiconductor Location**

Ref. No.	Location
D1	C-8
D2	D-6
D3	B-5
D10	B-10
D11	B-10
D13	D-9
D14	C-9
D15	C-8
D17	D-6
D21	C-5
D22	E-4
D23	C-8
D24	D-7
IC1	E-7
IC2	D-4
Q11	C-3
Q12	C-2
Q13	E-6
Q14	E-4



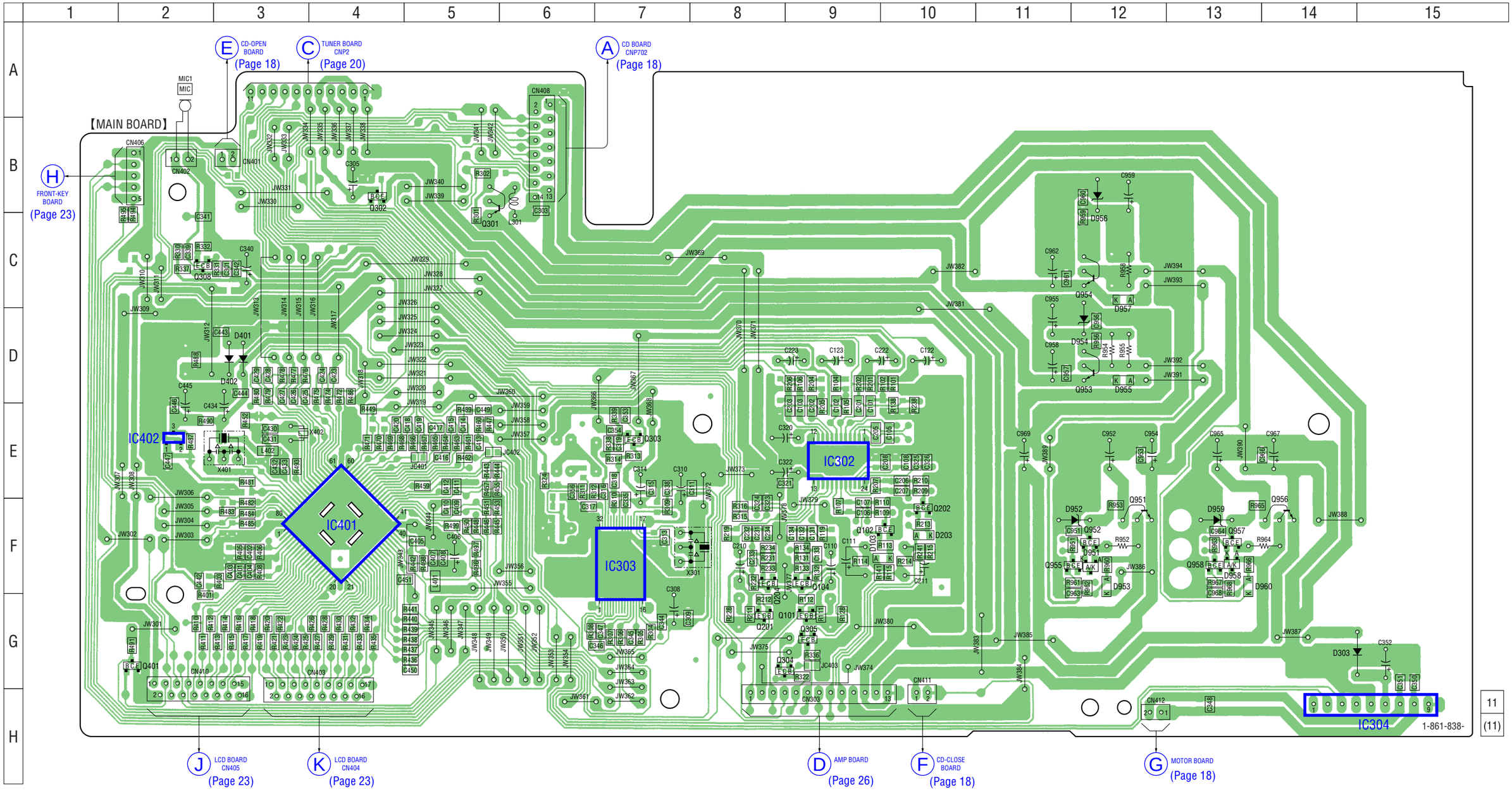
6-8. SCHEMATIC DIAGRAM – TUNER Section – • See page 28 for Waveform. • See page 28 for IC Block Diagrams.



6-9. PRINTED WIRING BOARD – MAIN Board –

• See page 17 for Circuit Boards Location.

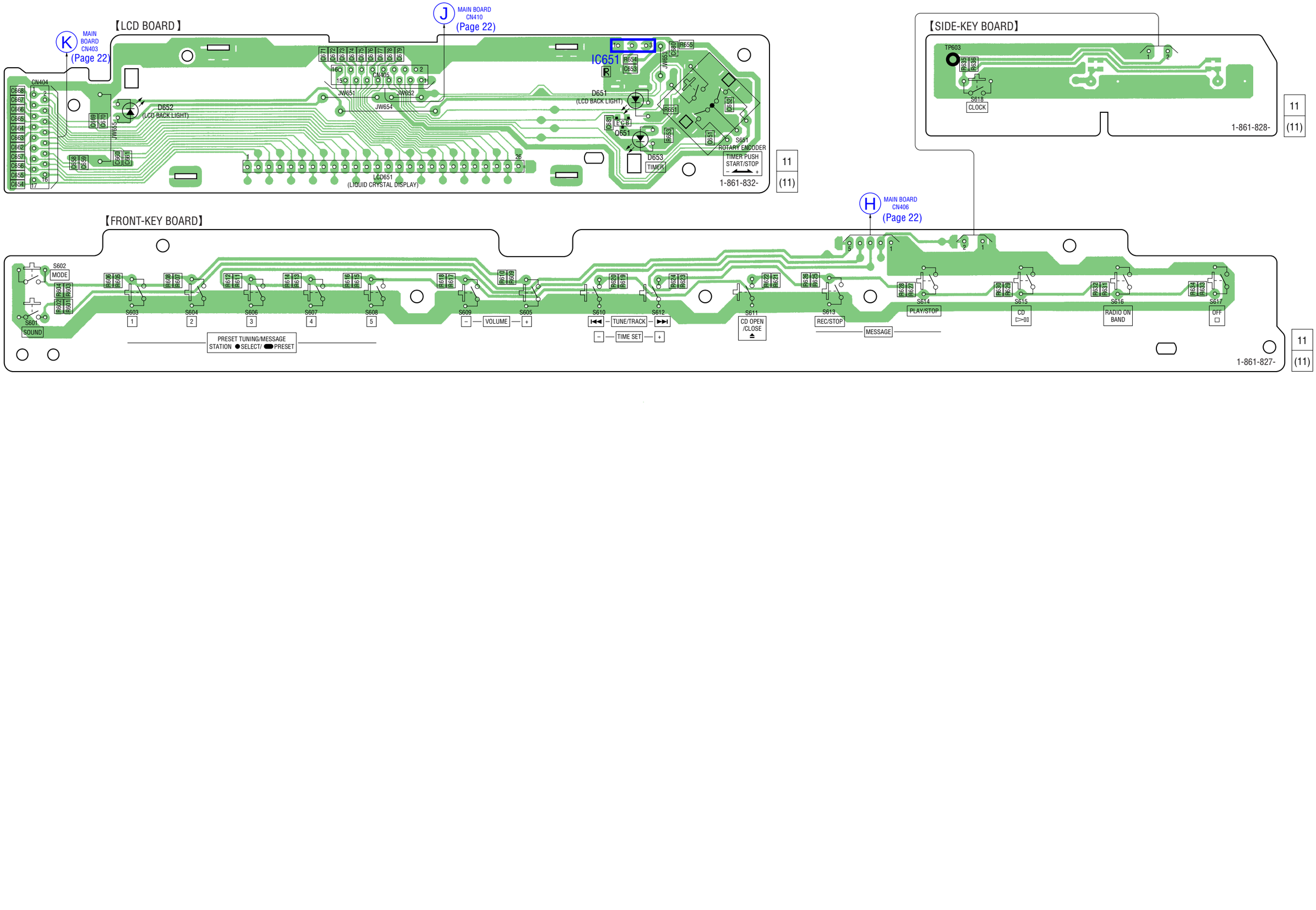
:Uses unleaded solder.



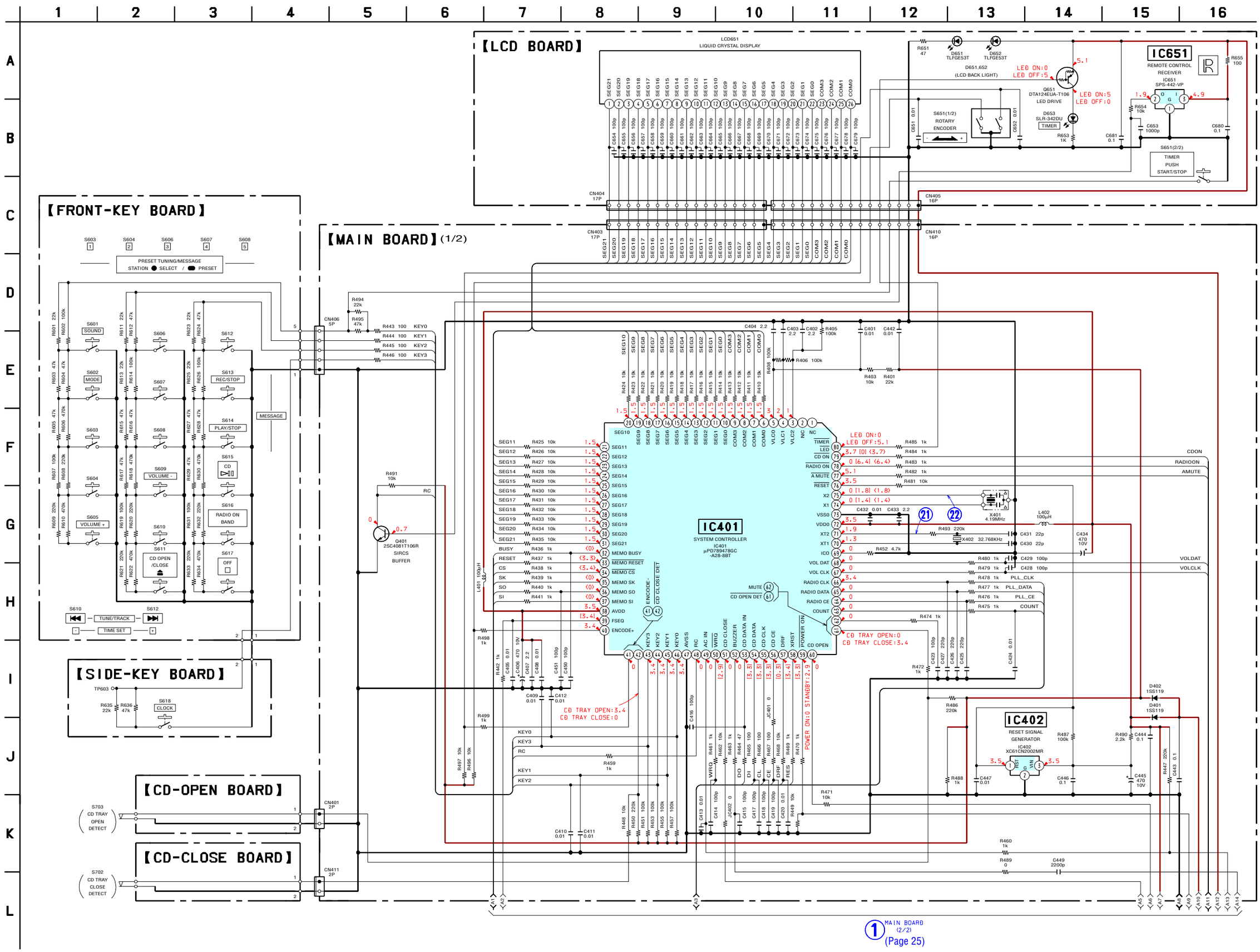
• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D103	F-10			Q303	E-7
D203	F-10	IC302	E-9	Q304	G-8
D303	G-14	IC303	F-7	Q305	G-9
D401	D-3	IC304	H-15	Q308	C-2
D402	D-3	IC401	F-4	Q401	G-2
D951	F-12	IC402	E-2	Q951	F-12
D952	F-12			Q952	F-12
D953	F-12	Q101	G-9	Q953	D-12
D954	D-12	Q102	F-10	Q954	C-12
D955	D-12	Q104	F-9	Q955	F-12
D956	B-12	Q201	G-8	Q956	F-14
D957	C-12	Q202	F-10	Q957	F-13
D958	F-13	Q204	F-8	Q958	F-13
D959	F-13	Q301	B-5		
D960	F-13	Q302	B-4		

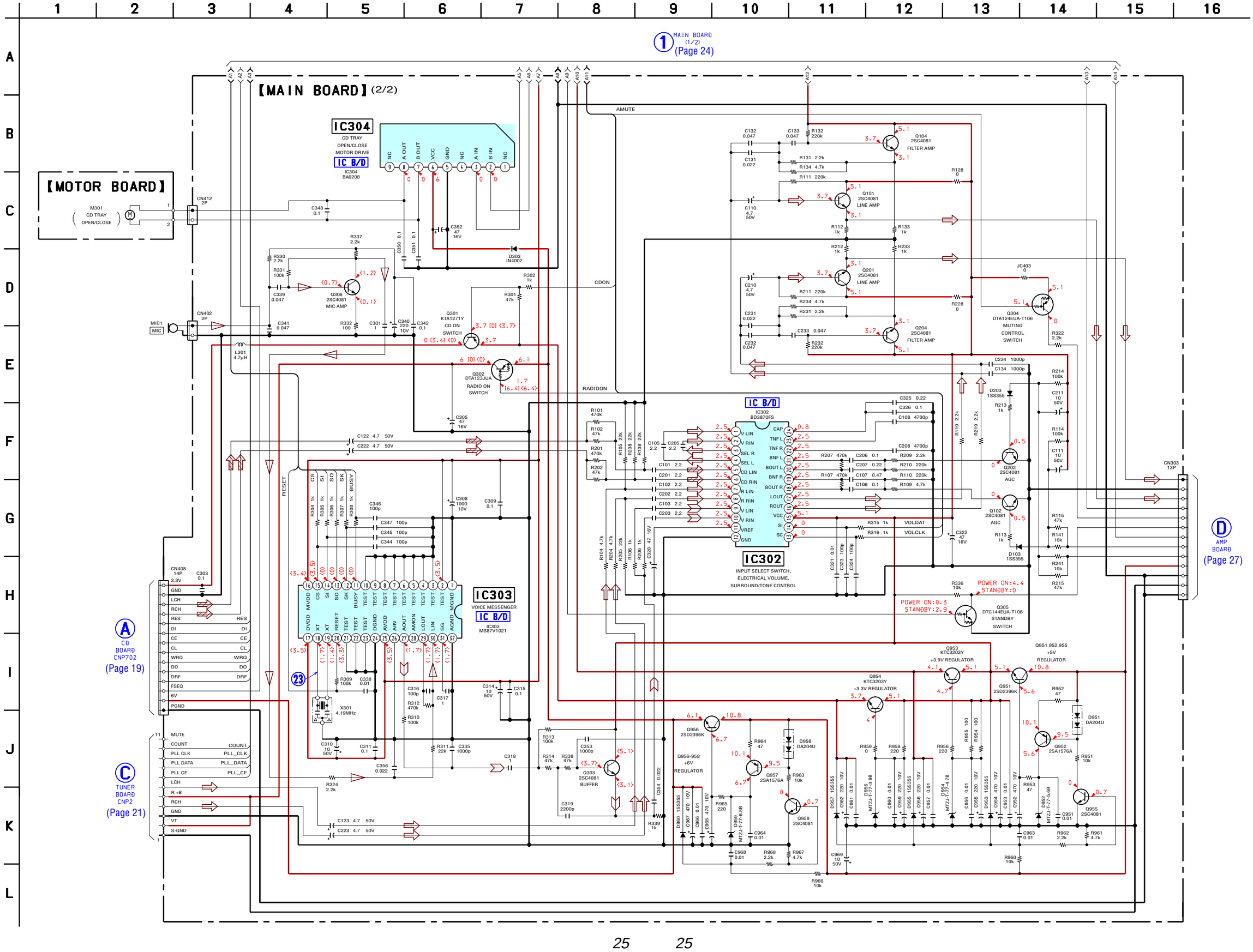
6-10. PRINTED WIRING BOARDS – PANEL Section – • See page 17 for Circuit Boards Location. :Uses unleaded solder.



6-11. SCHEMATIC DIAGRAM – MAIN Section (1/2) – • See page 28 for Waveforms. • See page 32 for IC Pin Function Description.



6-12. SCHEMATIC DIAGRAM – MAIN Section (2/2) – • See page 28 for Waveform. • See page 28 for IC Block Diagrams.



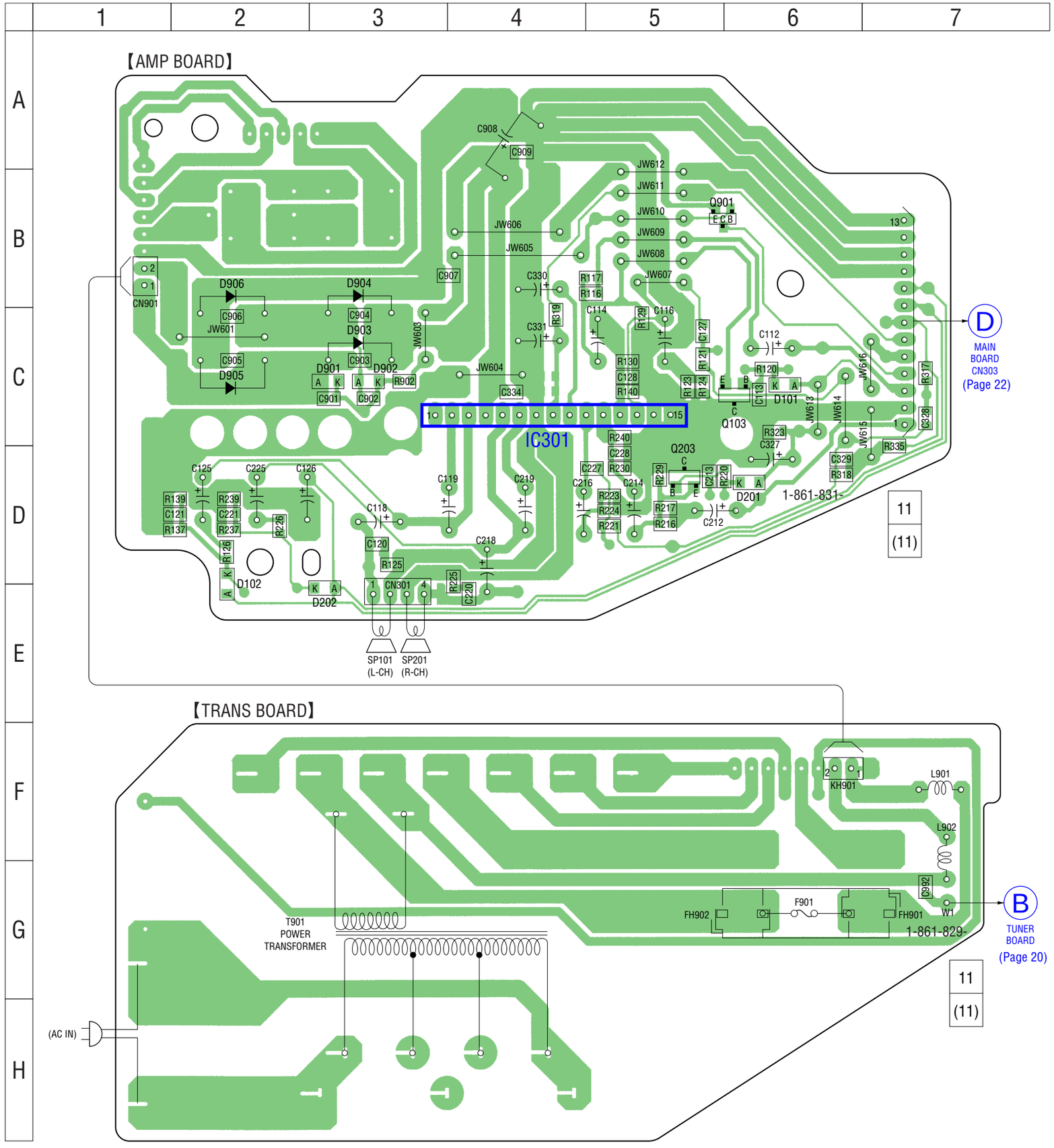
6-13. PRINTED WIRING BOARDS – AMP/TRANS Boards –

• See page 17 for Circuit Boards Location.

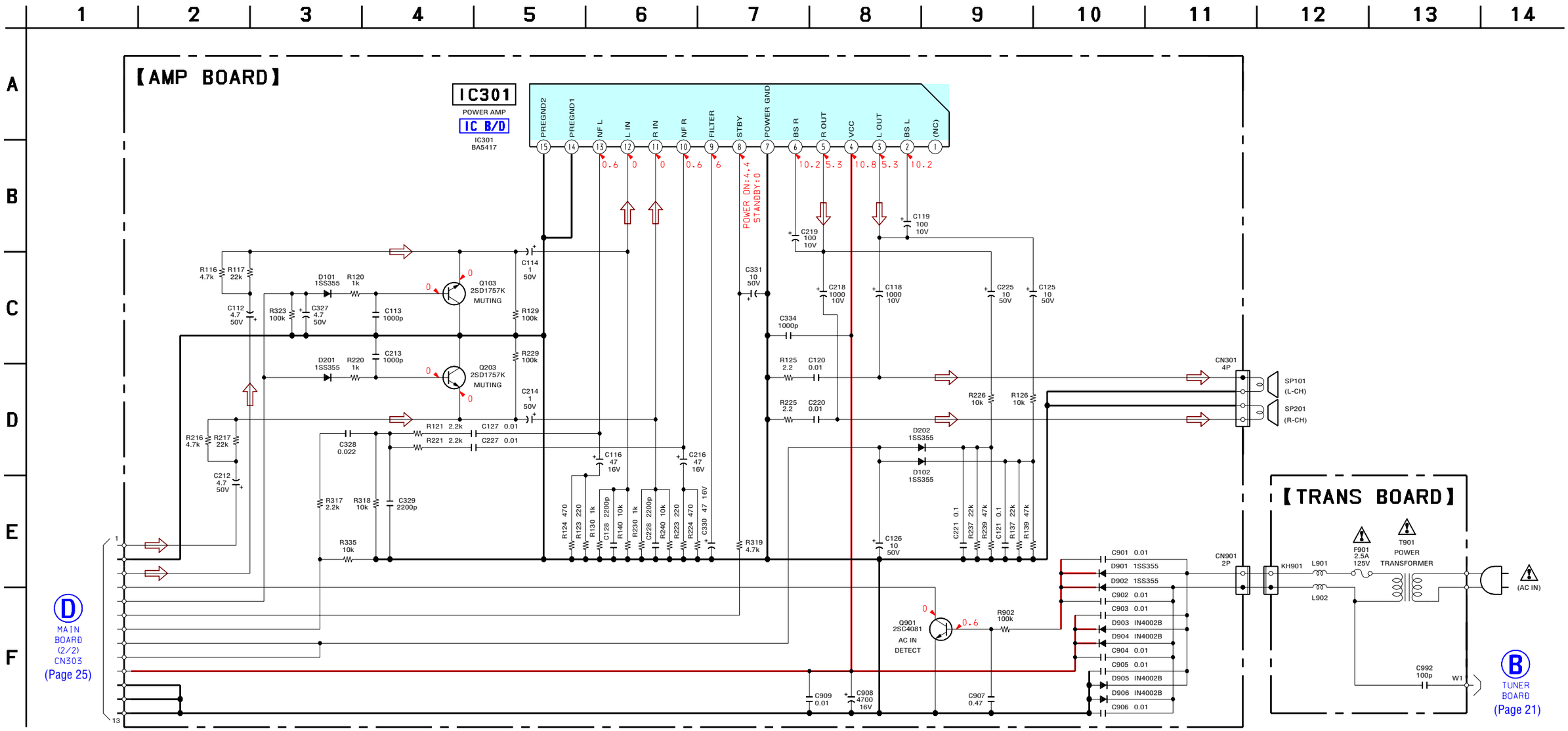
:Uses unleaded solder.

- **Semiconductor Location**

Ref. No.	Location
D101	C-6
D102	D-2
D201	D-6
D202	E-3
D901	C-3
D902	C-3
D903	C-3
D904	B-3
D905	C-2
D906	B-2
IC301	C-4
Q103	C-6
Q203	D-5
Q901	B-5



6-14. SCHEMATIC DIAGRAM – AMP/TRANS Boards – • See page 28 for IC Block Diagram.

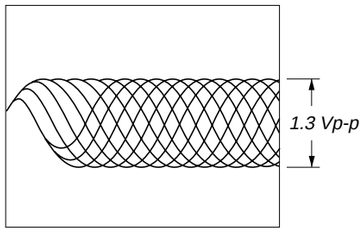


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

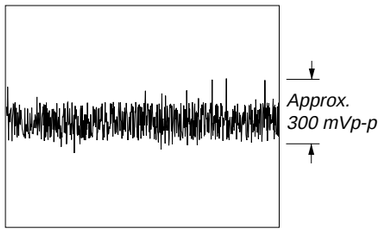
• Waveforms

– CD Board –

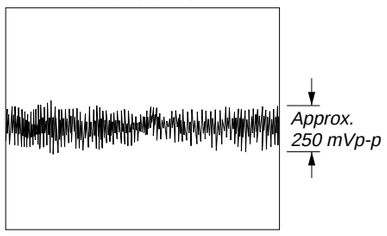
① IC701 ④ (RF) (CD play mode)



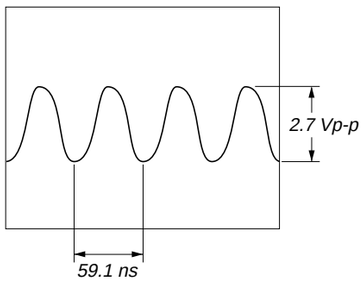
② IC701 ⑬ (FE) (CD play mode)



③ IC701 ⑮ (TE) (CD play mode)

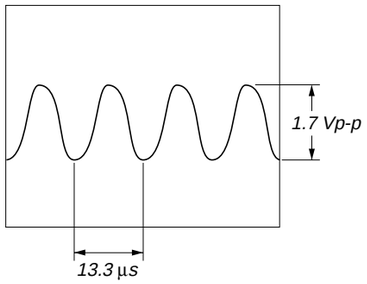


④ IC701 ㊽ (XOUT) (CD play mode)



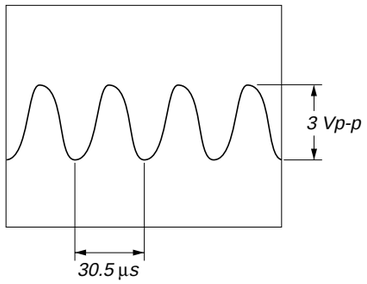
– TUNER Board –

⑪ IC2 ⑳ (XOUT)

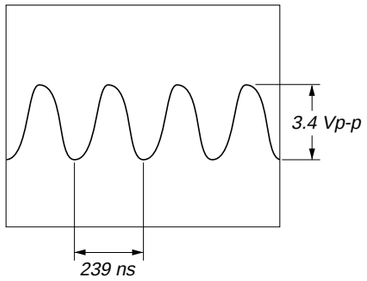


– MAIN Board –

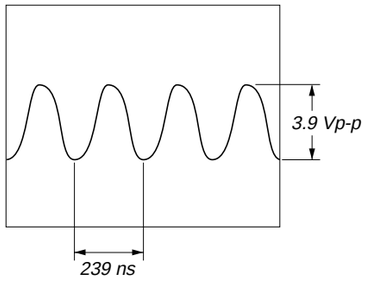
㉑ IC401 ㉛ (XT2)



㉒ IC401 ㉕ (X2) (CD play mode, Message record/play mode)



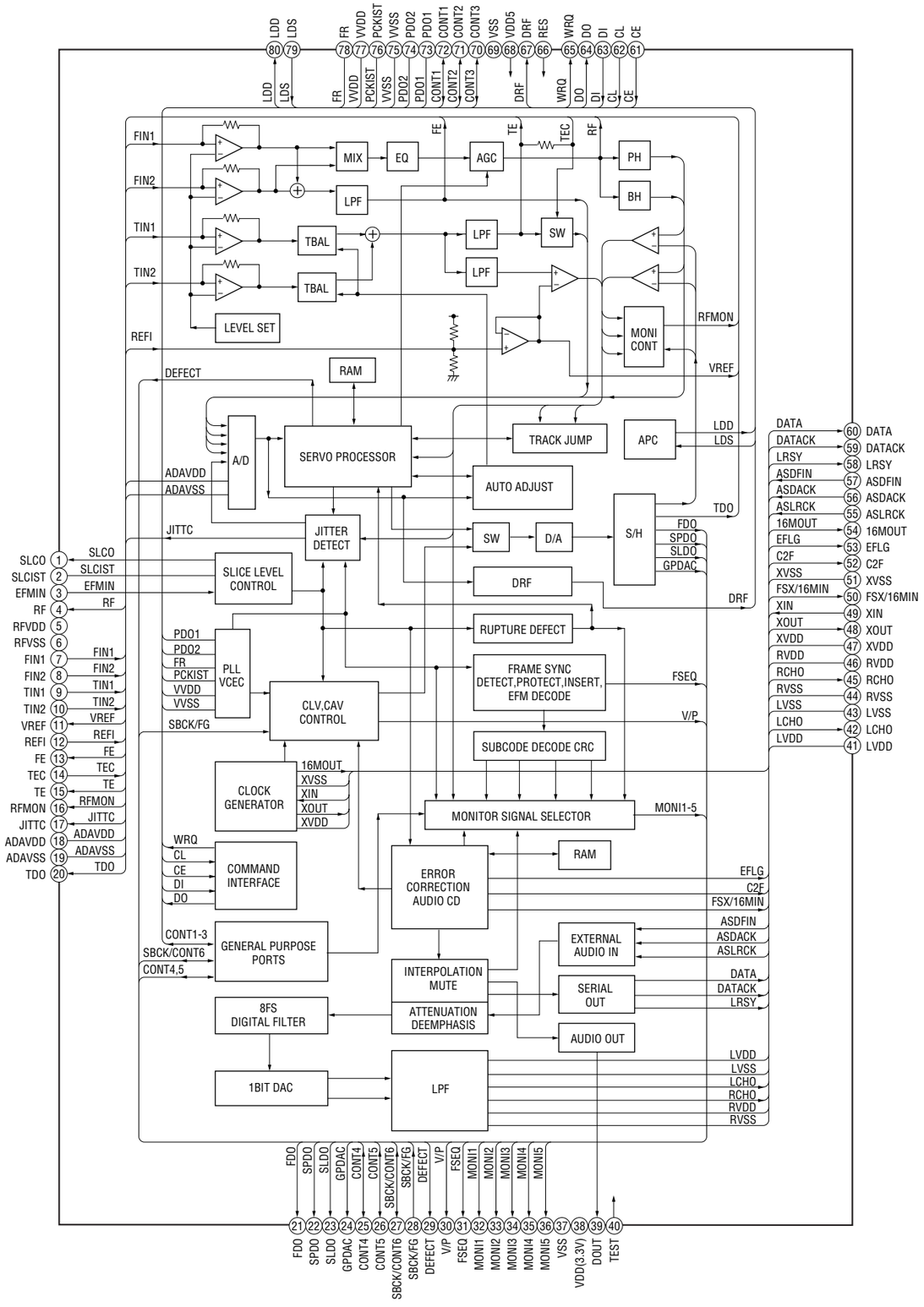
㉓ IC303 ⑱ (XT) (Message record/play mode)



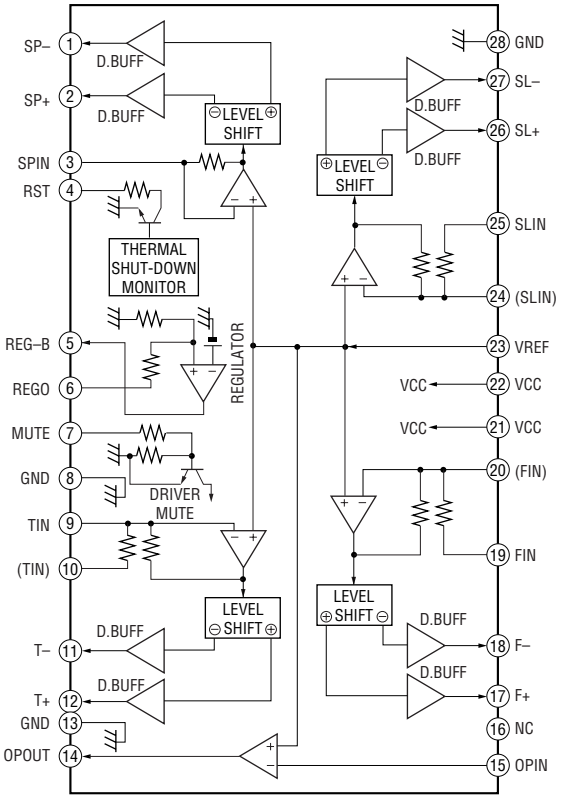
• IC Block Diagrams

– CD Board –

IC701 LC78646E-E

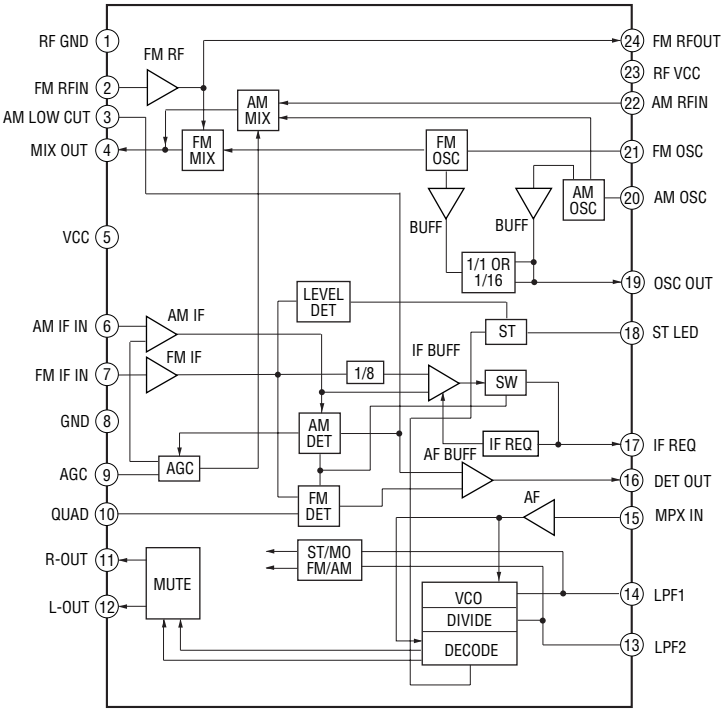


IC702 BA5826FP-E2

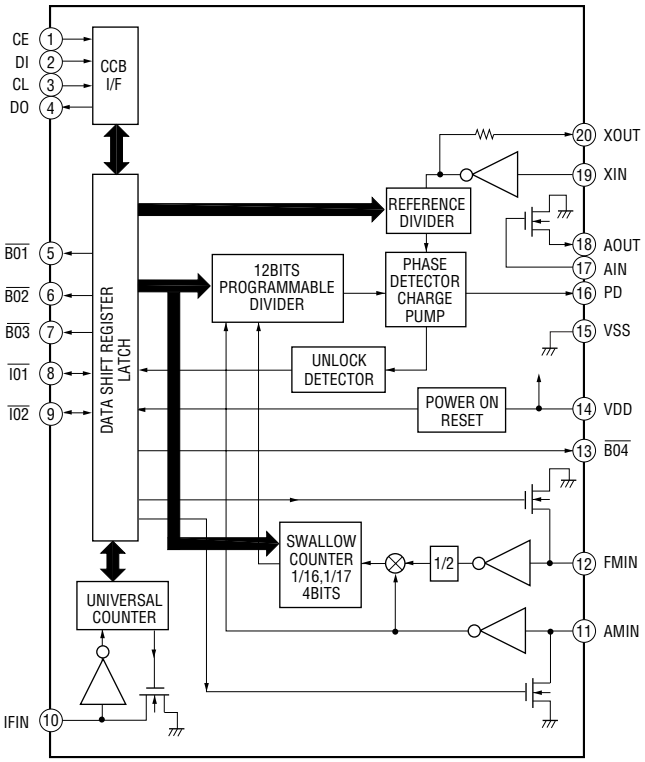


– TUNER Board –

IC1 TA2149BN

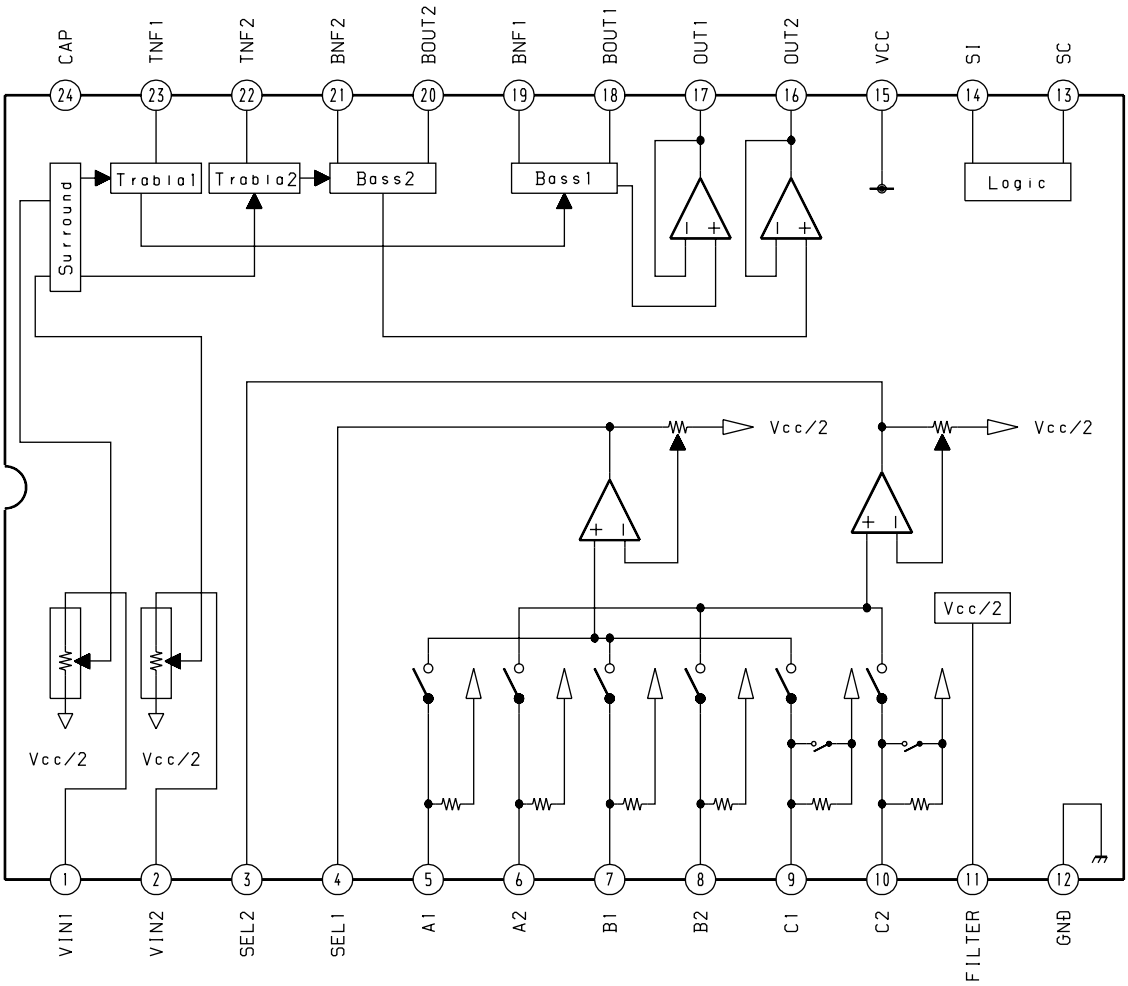


IC2 LC72137M-TLM

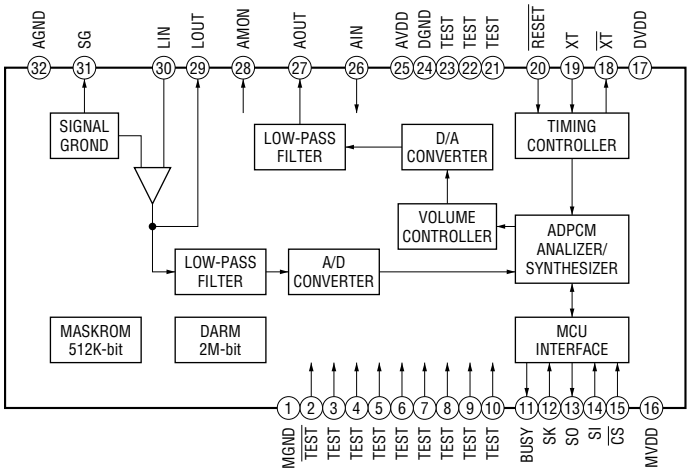


– MAIN Board –

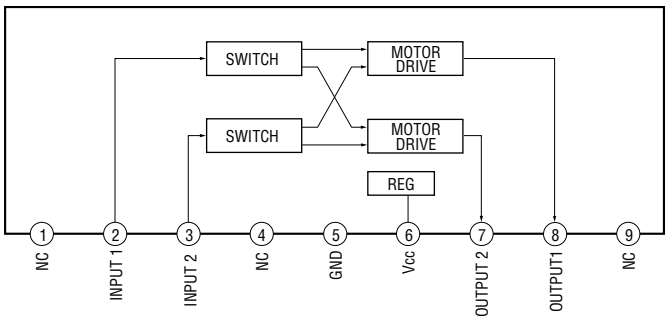
IC302 BD3870FS-E2



IC303 MS87V1021-02TA

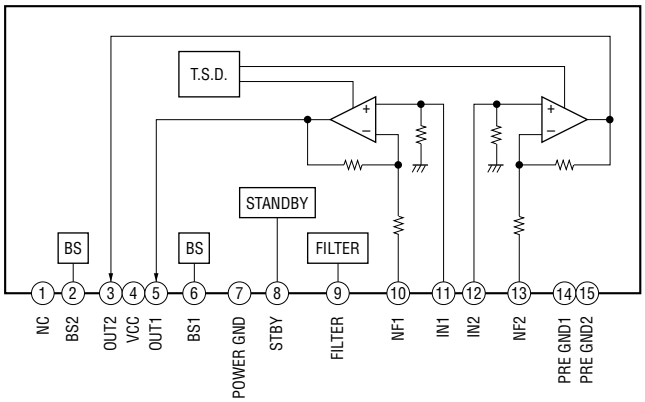


IC304 BA6208



– AMP Board –

IC301 BA5417



- **IC Pin Function Description**

MAIN BOARD IC401 μPD789478GC-A28-8BT (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1, 2	NC	—	Not used
3 to 5	VLC2 to VLC0	—	Terminal for doubler circuit capacitor connection to develop liquid crystal display drive voltage
6 to 9	COM0 to COM3	O	Common drive signal output to the liquid crystal display
10 to 31	SEG0 to SEG21	O	Segment drive signal output to the liquid crystal display
32	MEMO BUSY	I	Busy signal input from the voice messenger
33	$\overline{\text{MEMO RESET}}$	O	Reset signal output to the voice messenger "L": reset
34	$\overline{\text{MEMO CS}}$	O	Chip select signal output to the voice messenger "L" active
35	MEMO SK	O	Serial data transfer clock signal output to the voice messenger
36	MEMO SO	I	Serial data input from the voice messenger
37	MEMO SI	O	Serial data output to the voice messenger
38	AVDD	—	Power supply terminal (+3.3V) (for A/D converter)
39	C-FSEQ	I	Synchronizing signal detection signal input from the digital signal processor
40, 41	ENCODE+, ENCODE–	I	Jog dial pulse input from the rotary encoder
42	$\overline{\text{CD CLOSE DET}}$	I	CD tray close detect switch input terminal "L": CD tray is closed
43 to 46	KEY3 to KEY0	I	Front and side panel key input terminal (A/D input)
47	AVSS	—	Ground terminal (for A/D converter)
48	RC IN	I	SIRCS signal input from the remote control receiver
49	AC IN	I	Power failure detection signal input terminal
50	$\overline{\text{WRQ}}$	I	Interruption detection signal input from the digital signal processor "L" active
51	CD CLOSE	O	CD tray open/close motor drive signal (close direction) output terminal "H" active
52	BUZZER	I	Beep sound drive signal output terminal
53	CD DATA IN	I	Serial data input from the digital signal processor
54	CD DATA	O	Serial data output to the digital signal processor
55	CD CLK	O	Serial data transfer clock signal output to the digital signal processor
56	CD CE	O	Chip enable signal output to the digital signal processor
57	DRF	I	Focus on/off detection signal input from the digital signal processor
58	XRST	O	Reset signal output to the digital signal processor "L": reset
59	$\overline{\text{POWER ON}}$	O	Power amplifier on/off control signal output terminal "L": power amplifier on, "H": standby
60	CD OPEN	O	CD tray open/close motor drive signal (open direction) output terminal "H" active
61	$\overline{\text{CD OPEN DET}}$	I	CD tray open detect switch input terminal "L": CD tray is closed
62	MUTE	O	Muting on/off control signal output terminal Not used
63	COUNT	I	PLL serial count data input from the FM/AM PLL
64	RADIO CE	O	PLL chip enable signal output to the FM/AM PLL
65	RADIO DATA	O	PLL serial data output to the FM/AM PLL
66	RADIO CLK	O	PLL serial data transfer clock signal output to the FM/AM PLL
67	VOL CLK	O	Serial data transfer clock signal output to the electrical volume
68	VOL DAT	O	Serial data output to the electrical volume
69	IC0	—	Not used
70	XT1	I	Sub system clock input terminal (32.768 kHz)
71	XT2	O	Sub system clock output terminal (32.768 kHz)
72	VDD	—	Power supply terminal (+3.3V)
73	VSS	—	Ground terminal
74	X1	I	Main system clock input terminal (4.19 MHz)
75	X2	O	Main system clock output terminal (4.19 MHz)

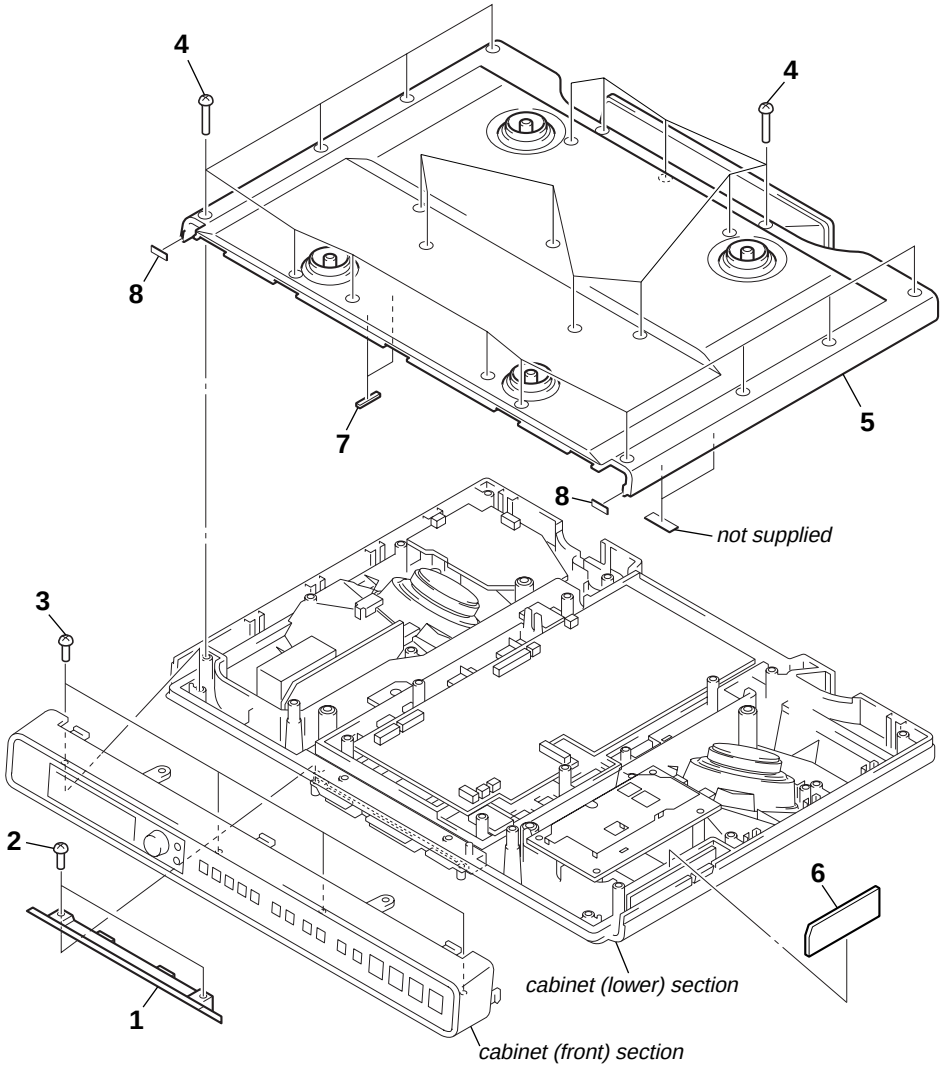
Pin No.	Pin Name	I/O	Description
76	$\overline{\text{RESET}}$	I	System reset signal input from the reset signal generator "L": reset For several hundreds msec. after the power supply rises, "L" is input, then it changes to "H"
77	$\overline{\text{A MUTE}}$	O	Audio muting on/off control signal output terminal "L": muting on
78	$\overline{\text{RADIO ON}}$	O	Power on/off control signal output for the radio section "L": power on
79	$\overline{\text{CD ON}}$	O	Power on/off control signal output for the CD section "L": power on
80	$\overline{\text{TIMER LED}}$	O	LED drive signal output of the TIMER "L": LED on

SECTION 7
EXPLODED VIEWS

NOTE:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories are given in the last of the electrical parts list.

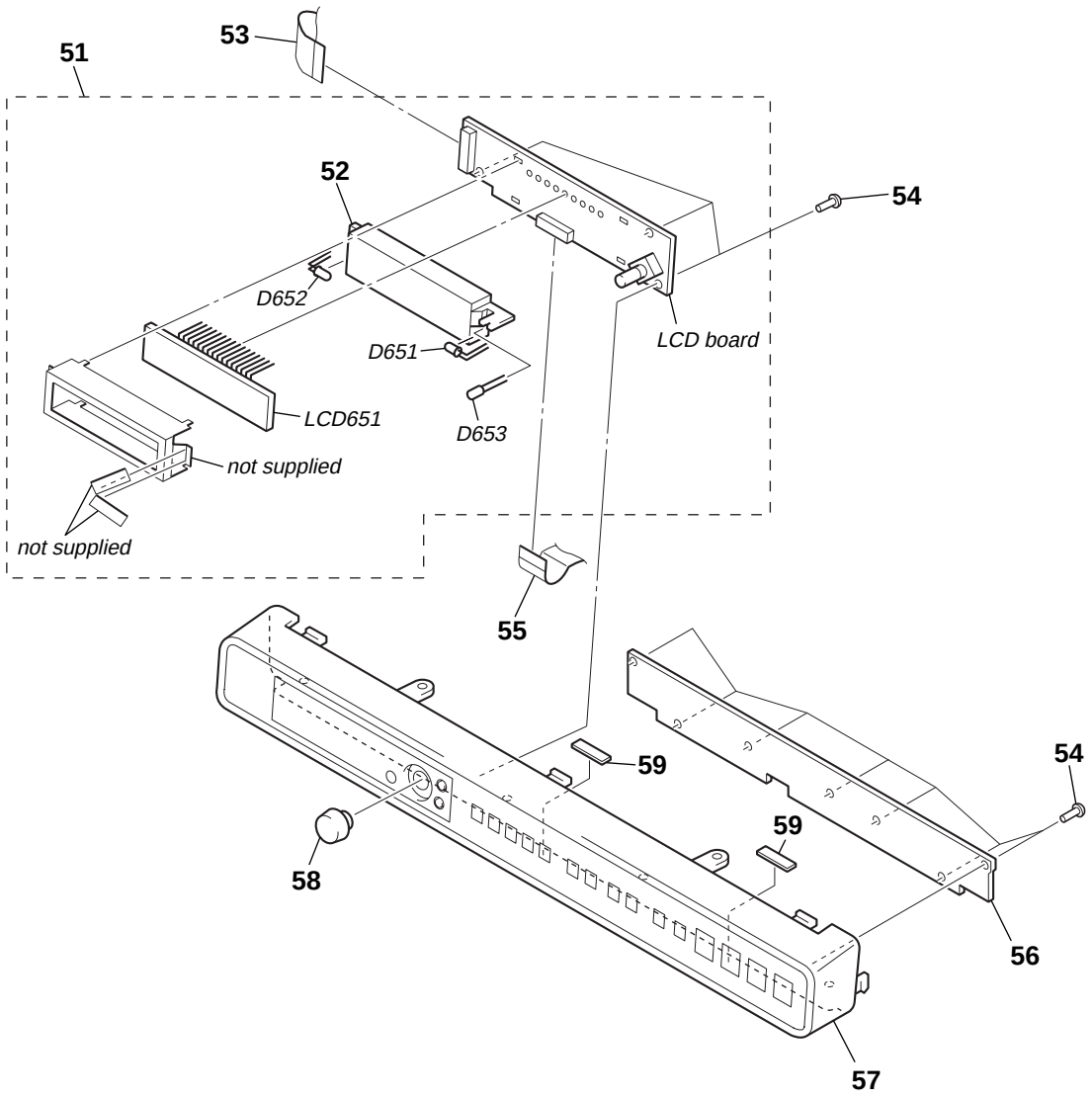
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

7-1. CABINET (UPPER) SECTION



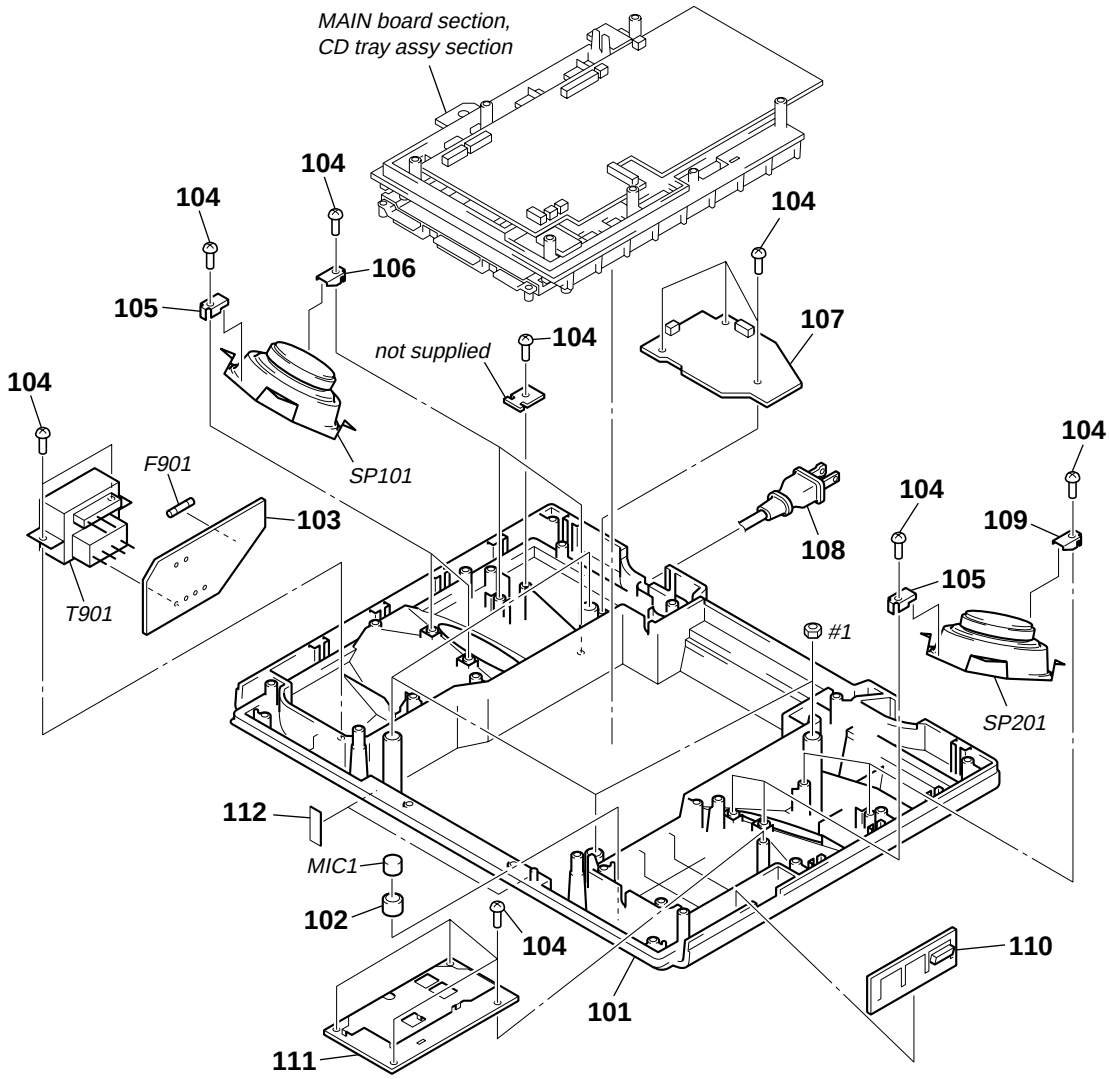
Ref. No.	Part No.	Description	Remark
1	3-264-176-11	LID, CD (SILVER)	
1	3-264-176-21	LID, CD (WHITE)	
2	3-254-070-01	SCREW	
3	3-253-143-01	SCREW (B2.6), (+) P TAPPING	
4	3-254-145-01	SCREW (B3), (+) BV TAPPING	
5	3-264-170-11	CABINET (UPPER) (SILVER)	
5	3-264-170-31	CABINET (UPPER) (WHITE)	
* 6	1-861-828-11	SIDE-KEY BOARD	
7	3-265-162-01	CUSHION (C)	
8	3-573-007-01	SHEET (1)	

7-2. CABINET (FRONT) SECTION



Ref. No.	Part No.	Description	Remark
* 51	A-4547-295-A	LCD BOARD, COMPLETE	
52	3-264-174-01	HOLDER (LCD)	
53	1-829-096-11	CABLE, FLEXIBLE FLAT (17 CORE)	
54	3-254-070-01	SCREW	
55	1-829-095-11	CABLE, FLEXIBLE FLAT (16 CORE)	
* 56	A-4547-291-A	FRONT-KEY BOARD, COMPLETE	
57	X-2021-189-1	CABINET (FRONT) SUB ASSY (SILVER)	
57	X-2021-191-1	CABINET (FRONT) SUB ASSY (WHITE)	
58	3-264-178-01	KNOB (TIMER)	
59	3-242-622-01	CUSHION (A)	
D651	6-500-218-01	LED TLFGE53T (LCD BACK LIGHT)	
D652	6-500-218-01	LED TLFGE53T (LCD BACK LIGHT)	
D653	8-719-053-59	LED SLR-342DU (TIMER)	
LCD651	1-805-559-11	DISPLAY PANEL, LIQUID CRYSTAL	

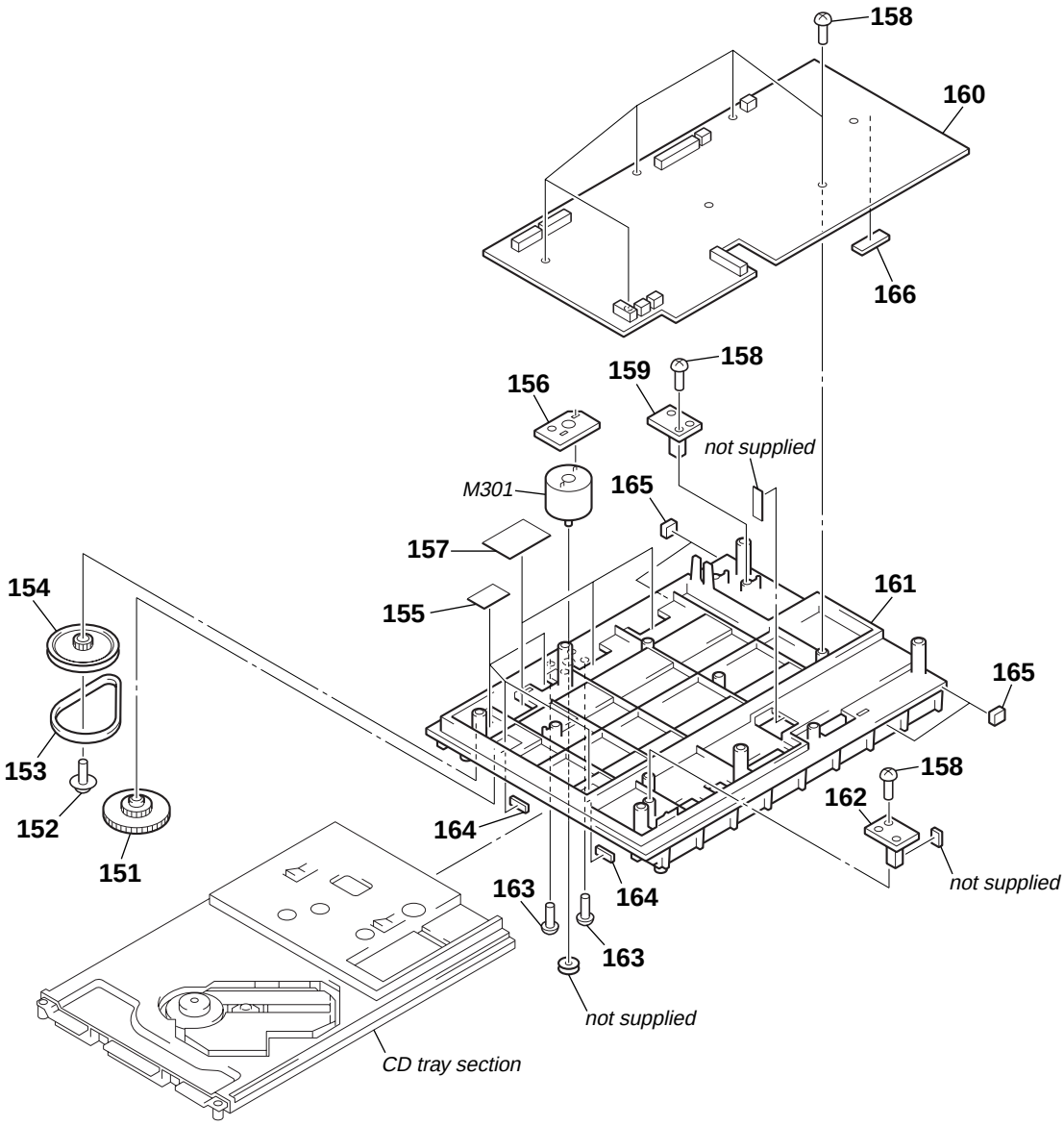
7-3. CABINET (LOWER) SECTION



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
101	X-2021-190-1	CABINET (LOWER) SUB ASSY	
102	3-229-057-01	HOLDER (MICROPHONE)	
* 103	1-861-829-11	TRANS BOARD	
104	3-254-143-01	SCREW (B3), (+) BV TAPPING	
* 105	3-264-193-01	BRACKET (SP) (F)	
* 106	3-264-194-01	BRACKET (SP) LB	
* 107	A-4547-302-A	AMP BOARD, COMPLETE	
⚠108	1-828-104-11	CORD, POWER	
* 109	3-264-196-01	BRACKET (SP) RB	
110	3-264-177-11	BUTTON (CLOCK)	
* 111	A-3683-339-A	TUNER BOARD, COMPLETE	
112	2-055-213-11	CUSHION (J)	
⚠F901	1-533-450-12	FUSE, GLASS TUBE (DIA. 5) (2.5A/125V)	
MIC1	1-542-260-61	MICROPHONE, ELECTRET CONDENSER	
SP101	1-825-799-11	SPEAKER (7.7cm)	
SP201	1-825-799-11	SPEAKER (7.7cm)	
⚠T901	1-443-227-11	TRANSFORMER, POWER	
#1	7-684-025-04	N 5, TYPE 2	

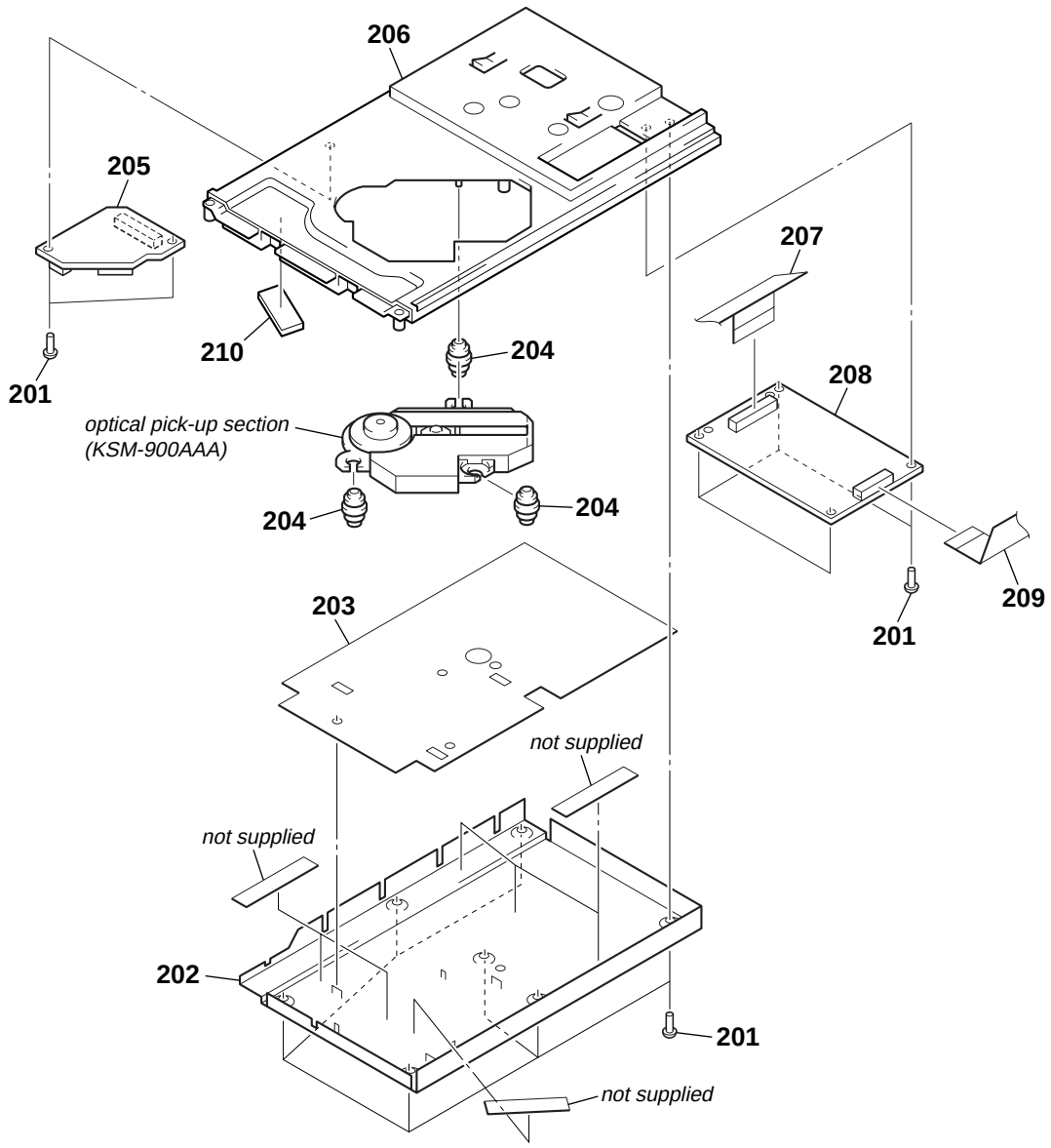
7-4. MAIN BOARD SECTION



Ref. No.	Part No.	Description	Remark
151	3-264-181-01	GEAR	
152	3-252-828-01	SCREW (B2.6), (+) PWH TAPPING	
153	3-933-020-01	BELT	
154	3-264-180-01	PULLEY	
155	3-264-217-01	SHEET (A)	
* 156	1-861-835-11	MOTOR BOARD	
157	3-264-218-01	SHEET (B)	
158	3-253-143-01	SCREW (B2.6), (+) P TAPPING	
* 159	1-861-834-11	CD-CLOSE BOARD	

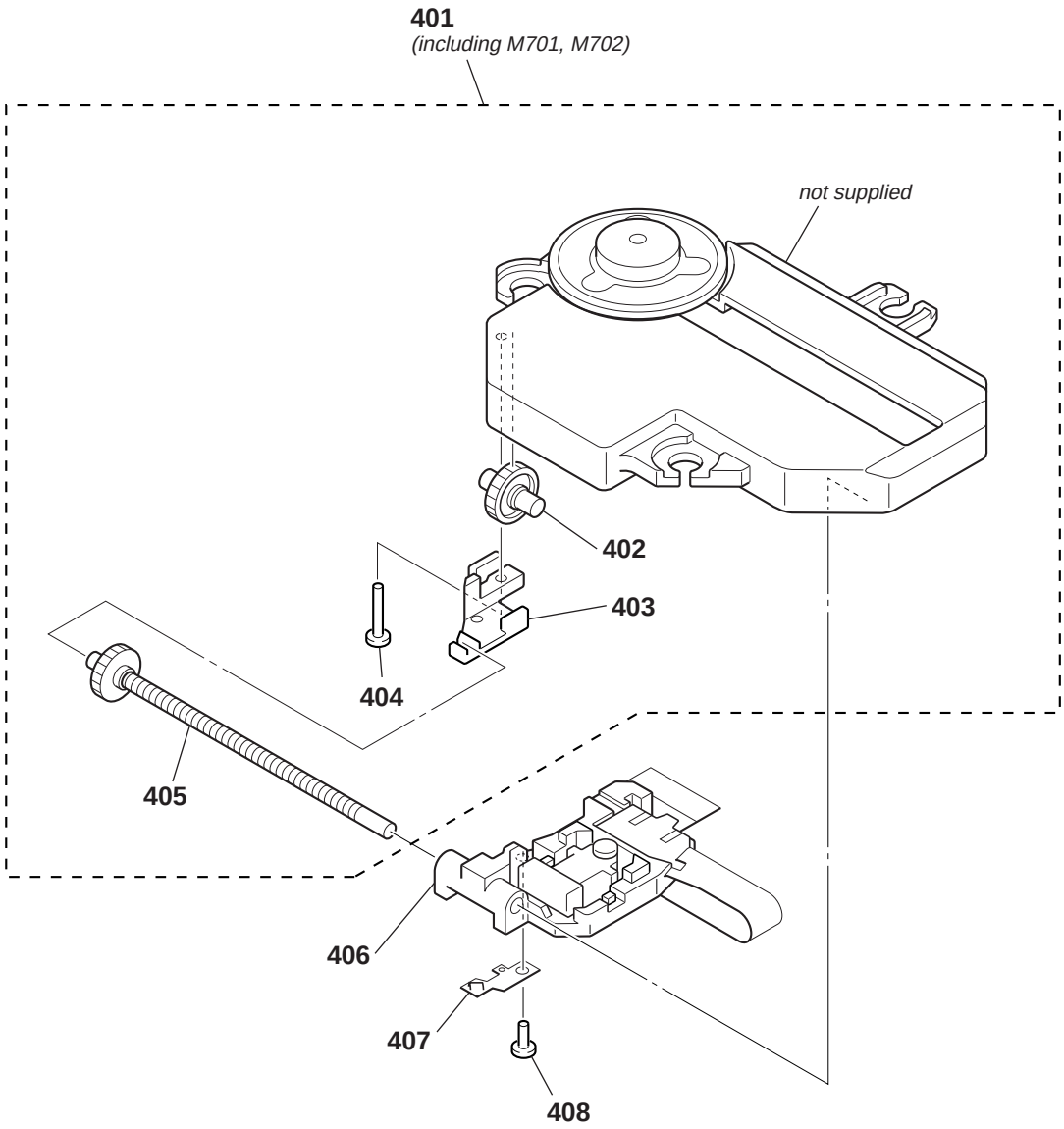
Ref. No.	Part No.	Description	Remark
* 160	A-4547-305-A	MAIN BOARD, COMPLETE	
161	3-264-173-01	CHASSIS	
* 162	1-861-833-11	CD-OPEN BOARD	
163	3-245-709-31	SCREW	
164	3-265-163-01	CUSHION (D)	
165	3-368-852-01	FOOT	
166	3-265-164-01	CUSHION (E)	
M301	1-763-183-12	MOTOR, DC (CD TRAY OPEN/CLOSE)	

7-5. CD TRAY ASSY SECTION



Ref. No.	Part No.	Description	Remark
201	3-253-143-01	SCREW (B2.6), (+) P TAPPING	
202	3-264-190-01	TRAY (LOWER), CD	
203	3-264-215-01	SHEET (CD TRAY), INSULATING	
204	4-975-762-01	INSULATOR	
* 205	1-861-830-11	RELAY BOARD	
206	3-264-175-01	TRAY (UPPER), CD	
207	1-829-094-11	CABLE, FLEXIBLE FLAT (20 CORE)	
* 208	A-4542-926-A	CD BOARD, COMPLETE	
209	1-829-093-11	CABLE, FLEXIBLE FLAT (14 CORE)	
210	3-223-740-01	CUSHION (C)	

7-6. OPTICAL PICK-UP SECTION (KSM-900AAA)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
* 401	A-4902-666-A	MD ASSY (900AAA-RP) (Including M701, M702)	
402	2-165-627-01	GEAR B (780C)	
403	2-165-626-01	HOLDER (780C)	
404	2-646-352-01	SCREW (2X8)	
405	X-2162-234-1	SCREW ASSY (780E), SLED	
⚠406	8-820-137-02	OPTICAL PICK-UP KSS-900A/C2RP	
407	2-165-630-02	SPRING (780C), RACK	
408	2-646-358-11	SCREW (B1.7X4)	

SECTION 8
ELECTRICAL PARTS LIST

AMP

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . uPA. . : µPA. .
  uPB. . : µPB. . uPC. . : µPC. .
  uPD. . : µPD. .
- CAPACITORS
  uF: µF
- COILS
  uH: µH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	A-4547-302-A	AMP BOARD, COMPLETE			
		**********			
	3-253-143-01	SCREW (B2.6), (+) P TAPPING			
		< CAPACITOR >			
C112	1-126-963-11	ELECT	4.7uF	20%	50V
C113	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C114	1-126-960-11	ELECT	1uF	20%	50V
C116	1-126-947-11	ELECT	47uF	20%	35V
C118	1-126-926-11	ELECT	1000uF	20%	10V
C119	1-104-658-91	ELECT	100uF	20%	10V
C120	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C121	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C125	1-126-964-11	ELECT	10uF	20%	50V
C126	1-126-964-11	ELECT	10uF	20%	50V
C127	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C128	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C212	1-126-963-11	ELECT	4.7uF	20%	50V
C213	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C214	1-126-960-11	ELECT	1uF	20%	50V
C216	1-126-947-11	ELECT	47uF	20%	35V
C218	1-126-926-11	ELECT	1000uF	20%	10V
C219	1-104-658-91	ELECT	100uF	20%	10V
C220	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C221	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C225	1-126-964-11	ELECT	10uF	20%	50V
C227	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C228	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C327	1-126-963-11	ELECT	4.7uF	20%	50V
C328	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C329	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C330	1-126-947-11	ELECT	47uF	20%	35V
C331	1-126-964-11	ELECT	10uF	20%	50V
C334	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C901	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C902	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C903	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C904	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C905	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C906	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C907	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C908	1-126-937-11	ELECT	4700uF	20%	16V
C909	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V

Ref. No.	Part No.	Description			Remark
		< CONNECTOR >			
CN301	1-815-445-11	PIN, CONNECTOR (PWB) 4P			
CN901	1-815-443-11	PIN, CONNECTOR (PWB) 2P			
		< DIODE >			
D101	8-719-988-61	DIODE 1SS355TE-17			
D102	8-719-988-61	DIODE 1SS355TE-17			
D201	8-719-988-61	DIODE 1SS355TE-17			
D202	8-719-988-61	DIODE 1SS355TE-17			
D901	8-719-988-61	DIODE 1SS355TE-17			
D902	8-719-988-61	DIODE 1SS355TE-17			
D903	8-719-063-79	DIODE 1N4002B			
D904	8-719-063-79	DIODE 1N4002B			
D905	8-719-063-79	DIODE 1N4002B			
D906	8-719-063-79	DIODE 1N4002B			
		< IC >			
IC301	8-759-426-51	IC BA5417			
		< TRANSISTOR >			
Q103	8-729-922-87	TRANSISTOR	2SD1757K-RS		
Q203	8-729-922-87	TRANSISTOR	2SD1757K-RS		
Q901	8-729-905-35	TRANSISTOR	2SC4081-R		
		< RESISTOR >			
R116	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R117	1-216-837-11	METAL CHIP	22K	5%	1/10W
R120	1-216-821-11	METAL CHIP	1K	5%	1/10W
R121	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R123	1-216-813-11	METAL CHIP	220	5%	1/10W
R124	1-216-817-11	METAL CHIP	470	5%	1/10W
R125	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R126	1-216-833-11	METAL CHIP	10K	5%	1/10W
R129	1-216-845-11	METAL CHIP	100K	5%	1/10W
R130	1-216-821-11	METAL CHIP	1K	5%	1/10W
R137	1-216-837-11	METAL CHIP	22K	5%	1/10W
R139	1-216-841-11	METAL CHIP	47K	5%	1/10W
R140	1-216-833-11	METAL CHIP	10K	5%	1/10W
R216	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R217	1-216-837-11	METAL CHIP	22K	5%	1/10W
R220	1-216-821-11	METAL CHIP	1K	5%	1/10W
R221	1-216-825-11	METAL CHIP	2.2K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R223	1-216-813-11	METAL CHIP	220	5%	1/10W
R224	1-216-817-11	METAL CHIP	470	5%	1/10W
R225	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R226	1-216-833-11	METAL CHIP	10K	5%	1/10W
R229	1-216-845-11	METAL CHIP	100K	5%	1/10W
R230	1-216-821-11	METAL CHIP	1K	5%	1/10W
R237	1-216-837-11	METAL CHIP	22K	5%	1/10W
R239	1-216-841-11	METAL CHIP	47K	5%	1/10W
R240	1-216-833-11	METAL CHIP	10K	5%	1/10W
R317	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R318	1-216-833-11	METAL CHIP	10K	5%	1/10W
R319	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R323	1-216-845-11	METAL CHIP	100K	5%	1/10W
R335	1-216-833-11	METAL CHIP	10K	5%	1/10W
R902	1-216-845-11	METAL CHIP	100K	5%	1/10W

****

* A-4542-926-A CD BOARD, COMPLETE

****

< CAPACITOR >

C701	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C702	1-126-947-11	ELECT	47uF	20%	35V
C703	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C704	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C705	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C706	1-126-960-11	ELECT	1uF	20%	50V
C707	1-115-156-11	CERAMIC CHIP	1uF		10V
C708	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C709	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C711	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C716	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C717	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C720	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C721	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C722	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C723	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C724	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C725	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C726	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C727	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C728	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C729	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C730	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C731	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C733	1-104-658-91	ELECT	100uF	20%	10V
C734	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C735	1-126-916-11	ELECT	1000uF	20%	6.3V
C736	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C740	1-126-925-91	ELECT	470uF	20%	10V
C741	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C742	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C743	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C744	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C745	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C746	1-104-658-91	ELECT	100uF	20%	10V
C751	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C754	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C755	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V

< CONNECTOR >

CNP701	1-784-781-11	CONNECTOR, FFC 20P	
* CNP702	1-784-736-11	CONNECTOR, FFC 14P	

< SHORT >

FB701	1-216-864-11	SHORT CHIP	0

< IC >

IC701	6-701-796-01	IC LC78646E-E	
IC702	6-701-787-11	IC BA5826FP-E2	

< SHORT >

JC703	1-216-864-11	SHORT CHIP	0
JC704	1-216-864-11	SHORT CHIP	0
JC705	1-216-864-11	SHORT CHIP	0
JC706	1-216-864-11	SHORT CHIP	0
JC707	1-216-864-11	SHORT CHIP	0
JC708	1-216-864-11	SHORT CHIP	0
JC709	1-216-864-11	SHORT CHIP	0
JC710	1-216-864-11	SHORT CHIP	0
JC711	1-216-864-11	SHORT CHIP	0
L706	1-216-864-11	SHORT CHIP	0

< TRANSISTOR >

Q701	8-729-054-57	TRANSISTOR	KTN2907AS-RTK

< RESISTOR >

R702	1-216-833-11	METAL CHIP	10K	5%	1/10W
R703	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R704	1-216-833-11	METAL CHIP	10K	5%	1/10W
R706	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R707	1-216-797-11	METAL CHIP	10	5%	1/10W
R708	1-216-833-11	METAL CHIP	10K	5%	1/10W
R709	1-216-837-11	METAL CHIP	22K	5%	1/10W
R710	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R711	1-216-813-11	METAL CHIP	220	5%	1/10W
R712	1-216-809-11	METAL CHIP	100	5%	1/10W
R713	1-216-809-11	METAL CHIP	100	5%	1/10W
R714	1-216-853-11	METAL CHIP	470K	5%	1/10W
R715	1-216-849-11	METAL CHIP	220K	5%	1/10W
R716	1-216-821-11	METAL CHIP	1K	5%	1/10W
R717	1-216-821-11	METAL CHIP	1K	5%	1/10W
R718	1-216-821-11	METAL CHIP	1K	5%	1/10W
R719	1-216-809-11	METAL CHIP	100	5%	1/10W
R720	1-216-809-11	METAL CHIP	100	5%	1/10W
R721	1-216-821-11	METAL CHIP	1K	5%	1/10W
R722	1-216-809-11	METAL CHIP	100	5%	1/10W
R723	1-216-809-11	METAL CHIP	100	5%	1/10W
R724	1-216-841-11	METAL CHIP	47K	5%	1/10W
R725	1-216-817-11	METAL CHIP	470	5%	1/10W
R726	1-216-817-11	METAL CHIP	470	5%	1/10W
R727	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R728	1-216-833-11	METAL CHIP	10K	5%	1/10W
R729	1-216-813-11	METAL CHIP	220	5%	1/10W
R730	1-216-821-11	METAL CHIP	1K	5%	1/10W

CD **CD-CLOSE** **CD-OPEN** **FRONT-KEY** **LCD**

Ref. No.	Part No.	Description			Remark
R731	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R732	1-216-813-11	METAL CHIP	220	5%	1/10W
R733	1-216-813-11	METAL CHIP	220	5%	1/10W
R739	1-216-821-11	METAL CHIP	1K	5%	1/10W
R740	1-216-849-11	METAL CHIP	220K	5%	1/10W
R741	1-216-833-11	METAL CHIP	10K	5%	1/10W
R742	1-216-853-11	METAL CHIP	470K	5%	1/10W
R744	1-216-845-11	METAL CHIP	100K	5%	1/10W
R746	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R747	1-216-837-11	METAL CHIP	22K	5%	1/10W
R748	1-216-809-11	METAL CHIP	100	5%	1/10W
R750	1-216-809-11	METAL CHIP	100	5%	1/10W
R751	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
		< VIBRATOR >			
X701	1-781-801-21	VIBRATOR, CERAMIC (16.9344MHz)			
**********					
*	1-861-834-11	CD-CLOSE BOARD			
		**********			
		< SWITCH >			
S702	1-571-936-11	SWITCH, LEAF (CD TRAY CLOSE DETECT)			
**********					
*	1-861-833-11	CD-OPEN BOARD			
		**********			
		< SWITCH >			
S703	1-571-936-11	SWITCH, LEAF (CD TRAY OPEN DETECT)			
**********					
*	A-4547-291-A	FRONT-KEY BOARD, COMPLETE			
		**********			
		< RESISTOR >			
R601	1-216-837-11	METAL CHIP	22K	5%	1/10W
R602	1-216-845-11	METAL CHIP	100K	5%	1/10W
R603	1-216-841-11	METAL CHIP	47K	5%	1/10W
R604	1-216-841-11	METAL CHIP	47K	5%	1/10W
R605	1-216-841-11	METAL CHIP	47K	5%	1/10W
R606	1-216-853-11	METAL CHIP	470K	5%	1/10W
R607	1-216-845-11	METAL CHIP	100K	5%	1/10W
R608	1-216-849-11	METAL CHIP	220K	5%	1/10W
R609	1-216-849-11	METAL CHIP	220K	5%	1/10W
R610	1-216-853-11	METAL CHIP	470K	5%	1/10W
R611	1-216-837-11	METAL CHIP	22K	5%	1/10W
R612	1-216-841-11	METAL CHIP	47K	5%	1/10W
R613	1-216-837-11	METAL CHIP	22K	5%	1/10W
R614	1-216-845-11	METAL CHIP	100K	5%	1/10W
R615	1-216-841-11	METAL CHIP	47K	5%	1/10W
R616	1-216-841-11	METAL CHIP	47K	5%	1/10W
R617	1-216-841-11	METAL CHIP	47K	5%	1/10W
R618	1-216-853-11	METAL CHIP	470K	5%	1/10W
R619	1-216-845-11	METAL CHIP	100K	5%	1/10W
R620	1-216-849-11	METAL CHIP	220K	5%	1/10W
R621	1-216-849-11	METAL CHIP	220K	5%	1/10W
R622	1-216-853-11	METAL CHIP	470K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R623	1-216-837-11	METAL CHIP	22K	5%	1/10W
R624	1-216-841-11	METAL CHIP	47K	5%	1/10W
R625	1-216-837-11	METAL CHIP	22K	5%	1/10W
R626	1-216-845-11	METAL CHIP	100K	5%	1/10W
R627	1-216-841-11	METAL CHIP	47K	5%	1/10W
R628	1-216-841-11	METAL CHIP	47K	5%	1/10W
R629	1-216-841-11	METAL CHIP	47K	5%	1/10W
R630	1-216-853-11	METAL CHIP	470K	5%	1/10W
R631	1-216-845-11	METAL CHIP	100K	5%	1/10W
R632	1-216-849-11	METAL CHIP	220K	5%	1/10W
R633	1-216-849-11	METAL CHIP	220K	5%	1/10W
R634	1-216-853-11	METAL CHIP	470K	5%	1/10W
		< SWITCH >			
S601	1-771-349-21	SWITCH, KEYBOARD (SOUND)			
S602	1-771-349-21	SWITCH, KEYBOARD (MODE)			
S603	1-771-349-21	SWITCH, KEYBOARD (1)			
S604	1-771-349-21	SWITCH, KEYBOARD (2)			
S605	1-771-349-21	SWITCH, KEYBOARD (VOLUME +)			
S606	1-771-349-21	SWITCH, KEYBOARD (3)			
S607	1-771-349-21	SWITCH, KEYBOARD (4)			
S608	1-771-349-21	SWITCH, KEYBOARD (5)			
S609	1-771-349-21	SWITCH, KEYBOARD (VOLUME –)			
S610	1-771-349-21	SWITCH, KEYBOARD (⏮)			
S611	1-771-349-21	SWITCH, KEYBOARD (CD OPEN/CLOSE ⏏)			
S612	1-771-349-21	SWITCH, KEYBOARD (⏭)			
S613	1-771-349-21	SWITCH, KEYBOARD (MESSAGE REC/STOP)			
S614	1-771-349-21	SWITCH, KEYBOARD (MESSAGE PLAY/STOP)			
S615	1-771-349-21	SWITCH, KEYBOARD (CD ▷II)			
S616	1-771-349-21	SWITCH, KEYBOARD (RADIO ON, BAND)			
S617	1-771-349-21	SWITCH, KEYBOARD (OFF □)			
**********					
*	A-4547-295-A	LCD BOARD, COMPLETE			
		**********			
	3-264-174-01	HOLDER (LCD)			
		< CAPACITOR >			
C651	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C652	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C653	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C654	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C655	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C656	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C657	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C658	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C659	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C660	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C661	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C662	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C663	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C664	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C665	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C666	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C667	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C668	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C669	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C670	1-162-927-11	CERAMIC CHIP	100PF	5%	50V

Ref. No.	Part No.	Description			Remark
C671	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C672	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C673	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C674	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C675	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C676	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C677	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C678	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C679	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C680	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C681	1-164-156-11	CERAMIC CHIP	0.1uF	10%	25V
		< CONNECTOR >			
CN404	1-779-554-21	CONNECTOR, FFC (LIF (NON-ZIF)) 17P			
CN405	1-779-553-21	CONNECTOR, FFC (LIF (NON-ZIF)) 16P			
		< LED >			
D651	6-500-218-01	LED TLFGE53T (LCD BACK LIGHT)			
D652	6-500-218-01	LED TLFGE53T (LCD BACK LIGHT)			
D653	8-719-053-59	LED SLR-342DU (TIMER)			
		< IC >			
IC651	6-600-481-01	IC SPS-442-VP			
		< LIQUID CRYSTAL DISPLAY >			
LCD651	1-805-559-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< TRANSISTOR >			
Q651	8-729-028-83	TRANSISTOR	DTA124EUA-T106		
		< RESISTOR >			
R651	1-216-805-11	METAL CHIP	47	5%	1/10W
R653	1-216-821-11	METAL CHIP	1K	5%	1/10W
R654	1-216-833-11	METAL CHIP	10K	5%	1/10W
R655	1-216-809-11	METAL CHIP	100	5%	1/10W
		< ROTARY ENCODER >			
S651	1-418-651-11	ENCODER, ROTARY (TIMER PUSH START/STOP)			
**********					
*	A-4547-305-A	MAIN BOARD, COMPLETE			
		**********			
	3-253-143-01	SCREW (B2.6), (+) P TAPPING			
		< CAPACITOR >			
C101	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C102	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C103	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C105	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C106	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C107	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C108	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C110	1-126-963-11	ELECT	4.7uF	20%	50V
C111	1-126-964-11	ELECT	10uF	20%	50V
C122	1-126-963-11	ELECT	4.7uF	20%	50V
C123	1-126-963-11	ELECT	4.7uF	20%	50V
C131	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C132	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C133	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C134	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C201	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C202	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C203	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C205	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C206	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C207	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C208	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C210	1-126-963-11	ELECT	4.7uF	20%	50V
C211	1-126-964-11	ELECT	10uF	20%	50V
C222	1-126-963-11	ELECT	4.7uF	20%	50V
C223	1-126-963-11	ELECT	4.7uF	20%	50V
C231	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C232	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C233	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C234	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C301	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C303	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C305	1-126-947-11	ELECT	47uF	20%	35V
C308	1-126-926-11	ELECT	1000uF	20%	10V
C309	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C310	1-126-964-11	ELECT	10uF	20%	50V
C311	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C314	1-126-964-11	ELECT	10uF	20%	50V
C315	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C316	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C317	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C318	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C319	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C320	1-126-947-11	ELECT	47uF	20%	35V
C321	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C322	1-126-947-11	ELECT	47uF	20%	35V
C323	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C324	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C325	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C326	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C335	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C338	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C339	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C340	1-126-923-91	ELECT	220uF	20%	10V
C341	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C342	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C344	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C345	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C346	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C347	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C348	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C350	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C351	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C352	1-126-947-11	ELECT	47uF	20%	35V
C353	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C354	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C356	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V

MAIN

Ref. No.	Part No.	Description			Remark
C401	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C402	1-135-834-11	CERAMIC CHIP	2.2uF		6.3V
C403	1-135-834-11	CERAMIC CHIP	2.2uF		6.3V
C404	1-135-834-11	CERAMIC CHIP	2.2uF		6.3V
C405	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C406	1-126-925-91	ELECT	470uF	20%	10V
C407	1-135-834-11	CERAMIC CHIP	2.2uF		6.3V
C408	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C409	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C410	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C411	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C412	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C413	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C414	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C415	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C416	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C417	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C418	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C419	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C420	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C423	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C424	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C425	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C426	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C427	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C428	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C429	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C430	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C431	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C432	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C433	1-135-834-11	CERAMIC CHIP	2.2uF		6.3V
C434	1-126-925-91	ELECT	470uF	20%	10V
C442	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C443	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C444	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C445	1-126-925-91	ELECT	470uF	20%	10V
C446	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C447	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C449	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C450	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C451	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C951	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C952	1-126-925-91	ELECT	470uF	20%	10V
C953	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C954	1-126-925-91	ELECT	470uF	20%	10V
C955	1-126-923-91	ELECT	220uF	20%	10V
C956	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C957	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C958	1-126-923-91	ELECT	220uF	20%	10V
C959	1-126-923-91	ELECT	220uF	20%	10V
C960	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C961	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C962	1-126-923-91	ELECT	220uF	20%	10V
C963	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C964	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C965	1-126-925-91	ELECT	470uF	20%	10V
C966	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C967	1-126-925-91	ELECT	470uF	20%	10V

Ref. No.	Part No.	Description			Remark
C968	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C969	1-126-964-11	ELECT	10uF	20%	50V
		< CONNECTOR >			
* CN303	1-785-665-11	PIN, CONNECTOR (PC BOARD) 13P			
CN401	1-815-443-11	PIN, CONNECTOR (PWB) 2P			
CN402	1-815-443-21	PIN, CONNECTOR (PWB) 2P			
CN403	1-779-285-11	CONNECTOR, FFC (LIF (NON-ZIF)) 17P			
CN406	1-815-446-11	PIN, CONNECTOR (PWB) 5P			
CN408	1-784-775-11	CONNECTOR, FFC 14P			
CN410	1-770-168-11	FFC/CONNECTOR, FPC (LIF (NON-ZIF)) 16P			
CN411	1-815-443-11	PIN, CONNECTOR (PWB) 2P			
CN412	1-815-443-21	PIN, CONNECTOR (PWB) 2P			
		< DIODE >			
D103	8-719-988-61	DIODE	1SS355TE-17		
D203	8-719-988-61	DIODE	1SS355TE-17		
D303	8-719-063-79	DIODE	1N4002B		
D401	8-719-911-19	DIODE	1SS119-25		
D402	8-719-911-19	DIODE	1SS119-25		
D951	8-719-941-23	DIODE	DA204U		
D952	8-719-109-89	DIODE	RD5.6ESB2		
D953	8-719-988-61	DIODE	1SS355TE-17		
D954	8-719-921-40	DIODE	MTZJ-4.7C		
D955	8-719-988-61	DIODE	1SS355TE-17		
D956	8-719-109-72	DIODE	RD3.9ESB2		
D957	8-719-988-61	DIODE	1SS355TE-17		
D958	8-719-941-23	DIODE	DA204U		
D959	8-719-109-97	DIODE	RD6.8ESB2		
D960	8-719-988-61	DIODE	1SS355TE-17		
		< IC >			
IC302	6-701-824-11	IC	BD3870FS-E2		
IC303	6-702-487-01	IC	MS87V1021-02TA		
IC304	8-759-962-08	IC	BA6208		
IC401	6-804-160-01	IC	uPD789478GC-A28-8BT		
IC402	8-759-682-21	IC	XC61CN2002MR		
		< SHORT >			
JC401	1-216-864-11	SHORT CHIP	0		
JC402	1-216-864-11	SHORT CHIP	0		
JC403	1-216-864-11	SHORT CHIP	0		
		< COIL >			
L301	1-414-181-11	INDUCTOR	4.7uH		
L401	1-412-963-11	INDUCTOR CHIP	100uH		
L402	1-412-963-11	INDUCTOR CHIP	100uH		
		< TRANSISTOR >			
Q101	8-729-905-35	TRANSISTOR	2SC4081-R		
Q102	8-729-905-35	TRANSISTOR	2SC4081-R		
Q104	8-729-905-35	TRANSISTOR	2SC4081-R		
Q201	8-729-905-35	TRANSISTOR	2SC4081-R		
Q202	8-729-905-35	TRANSISTOR	2SC4081-R		
Q204	8-729-905-35	TRANSISTOR	2SC4081-R		
Q301	8-729-037-13	TRANSISTOR	KTA1271Y		
Q302	8-729-028-81	TRANSISTOR	DTA123JUA-T106		
Q303	8-729-905-35	TRANSISTOR	2SC4081-R		

MAIN

Ref. No.	Part No.	Description			Remark
Q304	8-729-028-83	TRANSISTOR	DTA124EUA-T106		
Q305	8-729-029-14	TRANSISTOR	DTC144EUA-T106		
Q308	8-729-905-35	TRANSISTOR	2SC4081-R		
Q401	8-729-905-35	TRANSISTOR	2SC4081-R		
Q951	8-729-021-82	TRANSISTOR	2SD2396K		
Q952	8-729-026-52	TRANSISTOR	2SA1576A-T106-R		
Q953	8-729-036-86	TRANSISTOR	KTC3203Y-AT		
Q954	8-729-036-86	TRANSISTOR	KTC3203Y-AT		
Q955	8-729-905-35	TRANSISTOR	2SC4081-R		
Q956	8-729-021-82	TRANSISTOR	2SD2396K		
Q957	8-729-026-52	TRANSISTOR	2SA1576A-T106-R		
Q958	8-729-905-35	TRANSISTOR	2SC4081-R		
		< RESISTOR >			
R101	1-216-853-11	METAL CHIP	470K	5%	1/10W
R102	1-216-841-11	METAL CHIP	47K	5%	1/10W
R104	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R105	1-216-837-11	METAL CHIP	22K	5%	1/10W
R106	1-216-821-11	METAL CHIP	1K	5%	1/10W
R107	1-216-853-11	METAL CHIP	470K	5%	1/10W
R109	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R110	1-216-849-11	METAL CHIP	220K	5%	1/10W
R111	1-216-849-11	METAL CHIP	220K	5%	1/10W
R112	1-216-821-11	METAL CHIP	1K	5%	1/10W
R113	1-216-821-11	METAL CHIP	1K	5%	1/10W
R114	1-216-845-11	METAL CHIP	100K	5%	1/10W
R115	1-216-841-11	METAL CHIP	47K	5%	1/10W
R118	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R119	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R128	1-216-864-11	SHORT CHIP	0		
R131	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R132	1-216-849-11	METAL CHIP	220K	5%	1/10W
R133	1-216-821-11	METAL CHIP	1K	5%	1/10W
R134	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R138	1-216-837-11	METAL CHIP	22K	5%	1/10W
R141	1-216-833-11	METAL CHIP	10K	5%	1/10W
R201	1-216-853-11	METAL CHIP	470K	5%	1/10W
R202	1-216-841-11	METAL CHIP	47K	5%	1/10W
R204	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R205	1-216-837-11	METAL CHIP	22K	5%	1/10W
R206	1-216-821-11	METAL CHIP	1K	5%	1/10W
R207	1-216-853-11	METAL CHIP	470K	5%	1/10W
R209	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R210	1-216-849-11	METAL CHIP	220K	5%	1/10W
R211	1-216-849-11	METAL CHIP	220K	5%	1/10W
R212	1-216-821-11	METAL CHIP	1K	5%	1/10W
R213	1-216-821-11	METAL CHIP	1K	5%	1/10W
R214	1-216-845-11	METAL CHIP	100K	5%	1/10W
R215	1-216-841-11	METAL CHIP	47K	5%	1/10W
R218	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R219	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R228	1-216-864-11	SHORT CHIP	0		
R231	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R232	1-216-849-11	METAL CHIP	220K	5%	1/10W
R233	1-216-821-11	METAL CHIP	1K	5%	1/10W
R234	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R238	1-216-837-11	METAL CHIP	22K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R241	1-216-833-11	METAL CHIP	10K	5%	1/10W
R301	1-216-841-11	METAL CHIP	47K	5%	1/10W
R302	1-216-821-11	METAL CHIP	1K	5%	1/10W
R304	1-216-821-11	METAL CHIP	1K	5%	1/10W
R305	1-216-821-11	METAL CHIP	1K	5%	1/10W
R306	1-216-821-11	METAL CHIP	1K	5%	1/10W
R307	1-216-821-11	METAL CHIP	1K	5%	1/10W
R308	1-216-821-11	METAL CHIP	1K	5%	1/10W
R309	1-216-845-11	METAL CHIP	100K	5%	1/10W
R310	1-216-845-11	METAL CHIP	100K	5%	1/10W
R311	1-216-837-11	METAL CHIP	22K	5%	1/10W
R312	1-216-853-11	METAL CHIP	470K	5%	1/10W
R313	1-216-845-11	METAL CHIP	100K	5%	1/10W
R314	1-216-841-11	METAL CHIP	47K	5%	1/10W
R315	1-216-821-11	METAL CHIP	1K	5%	1/10W
R316	1-216-821-11	METAL CHIP	1K	5%	1/10W
R322	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R324	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R330	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R331	1-216-845-11	METAL CHIP	100K	5%	1/10W
R332	1-216-809-11	METAL CHIP	100	5%	1/10W
R336	1-216-833-11	METAL CHIP	10K	5%	1/10W
R337	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R338	1-216-841-11	METAL CHIP	47K	5%	1/10W
R339	1-216-821-11	METAL CHIP	1K	5%	1/10W
R401	1-216-837-11	METAL CHIP	22K	5%	1/10W
R403	1-216-833-11	METAL CHIP	10K	5%	1/10W
R405	1-216-845-11	METAL CHIP	100K	5%	1/10W
R406	1-216-845-11	METAL CHIP	100K	5%	1/10W
R408	1-216-845-11	METAL CHIP	100K	5%	1/10W
R410	1-216-833-11	METAL CHIP	10K	5%	1/10W
R411	1-216-833-11	METAL CHIP	10K	5%	1/10W
R412	1-216-833-11	METAL CHIP	10K	5%	1/10W
R413	1-216-833-11	METAL CHIP	10K	5%	1/10W
R414	1-216-833-11	METAL CHIP	10K	5%	1/10W
R415	1-216-833-11	METAL CHIP	10K	5%	1/10W
R416	1-216-833-11	METAL CHIP	10K	5%	1/10W
R417	1-216-833-11	METAL CHIP	10K	5%	1/10W
R418	1-216-833-11	METAL CHIP	10K	5%	1/10W
R419	1-216-833-11	METAL CHIP	10K	5%	1/10W
R420	1-216-833-11	METAL CHIP	10K	5%	1/10W
R421	1-216-833-11	METAL CHIP	10K	5%	1/10W
R422	1-216-833-11	METAL CHIP	10K	5%	1/10W
R423	1-216-833-11	METAL CHIP	10K	5%	1/10W
R424	1-216-833-11	METAL CHIP	10K	5%	1/10W
R425	1-216-833-11	METAL CHIP	10K	5%	1/10W
R426	1-216-833-11	METAL CHIP	10K	5%	1/10W
R427	1-216-833-11	METAL CHIP	10K	5%	1/10W
R428	1-216-833-11	METAL CHIP	10K	5%	1/10W
R429	1-216-833-11	METAL CHIP	10K	5%	1/10W
R430	1-216-833-11	METAL CHIP	10K	5%	1/10W
R431	1-216-833-11	METAL CHIP	10K	5%	1/10W
R432	1-216-833-11	METAL CHIP	10K	5%	1/10W
R433	1-216-833-11	METAL CHIP	10K	5%	1/10W
R434	1-216-833-11	METAL CHIP	10K	5%	1/10W
R435	1-216-833-11	METAL CHIP	10K	5%	1/10W
R436	1-216-821-11	METAL CHIP	1K	5%	1/10W

MAIN **MOTOR** **RELAY** **SIDE-KEY** **TRANS**

Ref. No.	Part No.	Description			Remark
R437	1-216-821-11	METAL CHIP	1K	5%	1/10W
R438	1-216-821-11	METAL CHIP	1K	5%	1/10W
R439	1-216-821-11	METAL CHIP	1K	5%	1/10W
R440	1-216-821-11	METAL CHIP	1K	5%	1/10W
R441	1-216-821-11	METAL CHIP	1K	5%	1/10W
R442	1-216-821-11	METAL CHIP	1K	5%	1/10W
R443	1-216-809-11	METAL CHIP	100	5%	1/10W
R444	1-216-809-11	METAL CHIP	100	5%	1/10W
R445	1-216-809-11	METAL CHIP	100	5%	1/10W
R446	1-216-809-11	METAL CHIP	100	5%	1/10W
R447	1-216-849-11	METAL CHIP	220K	5%	1/10W
R448	1-216-833-11	METAL CHIP	10K	5%	1/10W
R449	1-216-833-11	METAL CHIP	10K	5%	1/10W
R450	1-216-849-11	METAL CHIP	220K	5%	1/10W
R451	1-216-845-11	METAL CHIP	100K	5%	1/10W
R452	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R453	1-216-845-11	METAL CHIP	100K	5%	1/10W
R455	1-216-845-11	METAL CHIP	100K	5%	1/10W
R457	1-216-845-11	METAL CHIP	100K	5%	1/10W
R459	1-216-821-11	METAL CHIP	1K	5%	1/10W
R460	1-216-821-11	METAL CHIP	1K	5%	1/10W
R461	1-216-821-11	METAL CHIP	1K	5%	1/10W
R462	1-216-833-11	METAL CHIP	10K	5%	1/10W
R463	1-216-821-11	METAL CHIP	1K	5%	1/10W
R464	1-216-805-11	METAL CHIP	47	5%	1/10W
R465	1-216-809-11	METAL CHIP	100	5%	1/10W
R466	1-216-809-11	METAL CHIP	100	5%	1/10W
R467	1-216-809-11	METAL CHIP	100	5%	1/10W
R468	1-216-833-11	METAL CHIP	10K	5%	1/10W
R469	1-216-821-11	METAL CHIP	1K	5%	1/10W
R470	1-216-821-11	METAL CHIP	1K	5%	1/10W
R471	1-216-833-11	METAL CHIP	10K	5%	1/10W
R472	1-216-821-11	METAL CHIP	1K	5%	1/10W
R474	1-216-821-11	METAL CHIP	1K	5%	1/10W
R475	1-216-821-11	METAL CHIP	1K	5%	1/10W
R476	1-216-821-11	METAL CHIP	1K	5%	1/10W
R477	1-216-821-11	METAL CHIP	1K	5%	1/10W
R478	1-216-821-11	METAL CHIP	1K	5%	1/10W
R479	1-216-821-11	METAL CHIP	1K	5%	1/10W
R480	1-216-821-11	METAL CHIP	1K	5%	1/10W
R481	1-216-833-11	METAL CHIP	10K	5%	1/10W
R482	1-216-821-11	METAL CHIP	1K	5%	1/10W
R483	1-216-821-11	METAL CHIP	1K	5%	1/10W
R484	1-216-821-11	METAL CHIP	1K	5%	1/10W
R485	1-216-821-11	METAL CHIP	1K	5%	1/10W
R486	1-216-849-11	METAL CHIP	220K	5%	1/10W
R487	1-216-845-11	METAL CHIP	100K	5%	1/10W
R488	1-216-821-11	METAL CHIP	1K	5%	1/10W
R489	1-216-864-11	SHORT CHIP	0		
R490	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R491	1-216-833-11	METAL CHIP	10K	5%	1/10W
R493	1-216-849-11	METAL CHIP	220K	5%	1/10W
R494	1-216-837-11	METAL CHIP	22K	5%	1/10W
R495	1-216-841-11	METAL CHIP	47K	5%	1/10W
R496	1-216-833-11	METAL CHIP	10K	5%	1/10W
R497	1-216-833-11	METAL CHIP	10K	5%	1/10W
R498	1-216-821-11	METAL CHIP	1K	5%	1/10W
R499	1-216-821-11	METAL CHIP	1K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R951	1-216-833-11	METAL CHIP	10K	5%	1/10W
R952	1-249-401-11	CARBON	47	5%	1/4W
R953	1-216-805-11	METAL CHIP	47	5%	1/10W
R954	1-247-807-31	CARBON	100	5%	1/4W
R955	1-247-807-31	CARBON	100	5%	1/4W
R956	1-216-813-11	METAL CHIP	220	5%	1/10W
R958	1-249-409-11	CARBON	220	5%	1/4W
R959	1-216-864-11	SHORT CHIP	0		
R960	1-216-833-11	METAL CHIP	10K	5%	1/10W
R961	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R962	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R963	1-216-833-11	METAL CHIP	10K	5%	1/10W
R964	1-249-401-11	CARBON	47	5%	1/4W
R965	1-216-813-11	METAL CHIP	220	5%	1/10W
R966	1-216-833-11	METAL CHIP	10K	5%	1/10W
R967	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R968	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
		< VIBRATOR >			
X301	1-795-054-21	VIBRATOR, CERAMIC (4.19MHz)			
X401	1-795-054-21	VIBRATOR, CERAMIC (4.19MHz)			
X402	1-760-252-12	VIBRATOR, CRYSTAL (32.768kHz)			
**********					
*	1-861-835-11	MOTOR BOARD			
		**********			
**********					
*	1-861-830-11	RELAY BOARD			
		**********			
		< CONNECTOR >			
CNP704	1-784-742-11	CONNECTOR, FFC 20P			
CNP705	1-779-553-21	CONNECTOR, FFC (LIF (NON-ZIF)) 16P			
CNP706	1-565-878-11	PIN, CONNECTOR (PC BOARD) 6P			
**********					
*	1-861-828-11	SIDE-KEY BOARD			
		**********			
		< RESISTOR >			
R635	1-216-837-11	METAL CHIP	22K	5%	1/10W
R636	1-216-841-11	METAL CHIP	47K	5%	1/10W
		< SWITCH >			
S618	1-771-349-21	SWITCH, KEYBOARD (CLOCK)			
**********					
*	1-861-829-11	TRANS BOARD			
		**********			
	1-533-233-31	FUSE HOLDER			
		< CAPACITOR >			
C992	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
		< COIL >			
L901	1-402-964-11	COIL, AIR-CORE			

TRANS **TUNER**

Ref. No.	Part No.	Description			Remark
L902	1-402-964-11	COIL, AIR-CORE			
**********					
*	A-3683-339-A	TUNER BOARD, COMPLETE			
		**********			
		< BAND PASS FILTER >			
BPF1	1-781-765-11	FILTER, BAND PASS			
		< CAPACITOR >			
C1	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C2	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C3	1-115-871-11	ELECT	1uF	20%	50V
C4	1-126-176-11	ELECT	220uF	20%	10V
C5	1-126-794-11	ELECT	4.7uF	20%	50V
C6	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C7	1-162-911-11	CERAMIC CHIP	6PF	0.5PF	50V
C9	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C10	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C11	1-162-911-11	CERAMIC CHIP	6PF	0.5PF	50V
C13	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C14	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C15	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C16	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C18	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C19	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C21	1-128-817-51	CERAMIC	470PF	5%	50V
C22	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C23	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C24	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C25	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C26	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C27	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C28	1-161-051-00	CERAMIC	0.01uF	10%	25V
C29	1-102-508-91	CERAMIC	10PF	0.5PF	50V
C30	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C31	1-102-978-00	CERAMIC	220PF	5%	50V
C32	1-164-361-11	CERAMIC CHIP	0.047uF		25V
C33	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C34	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C35	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C36	1-115-871-11	ELECT	1uF	20%	50V
C37	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C39	1-115-871-11	ELECT	1uF	20%	50V
C40	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C41	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C42	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C43	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C51	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C52	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C53	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C54	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C55	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C56	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C57	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C58	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C59	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C60	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C61	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C62	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C63	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C64	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C65	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C66	1-126-176-11	ELECT	220uF	20%	10V
C67	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C68	1-137-194-11	FILM	0.47uF	5%	50V
C69	1-162-911-11	CERAMIC CHIP	6PF	0.5PF	50V
C70	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C71	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C72	1-126-786-11	ELECT	47uF	20%	16V
C75	1-164-361-11	CERAMIC CHIP	0.047uF		25V
C76	1-162-911-11	CERAMIC CHIP	6PF	0.5PF	50V
C77	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C83	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C85	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C86	1-162-995-11	CERAMIC CHIP	0.022uF		50V
C87	1-164-361-11	CERAMIC CHIP	0.047uF		25V
C89	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C90	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C91	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C92	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
		< FILTER >			
CF2	1-795-215-21	FILTER, CERAMIC			
CF4	1-781-962-21	FILTER, CERAMIC			
		< CONNECTOR >			
* CNP2	1-785-663-11	PIN, CONNECTOR (PC BOARD) 11P			
		< TRIMMER >			
CT2	1-141-601-21	CAP, ADJ			
CT3	1-141-601-21	CAP, ADJ			
CT4	1-141-601-21	CAP, ADJ			
CT5	1-141-601-21	CAP, ADJ			
		< DIODE >			
D1	8-719-078-48	DIODE KV1471ETR1-3			
D2	8-719-078-48	DIODE KV1471ETR1-3			
D3	8-719-050-69	DIODE KV1520N			
D10	8-719-988-61	DIODE 1SS355TE-17			
D11	8-719-988-61	DIODE 1SS355TE-17			
D13	8-719-082-21	DIODE KDS112-RTK			
D14	8-719-082-22	DIODE KDS114-RTK			
D15	8-719-082-22	DIODE KDS114-RTK			
D17	8-719-082-22	DIODE KDS114-RTK			
D21	8-719-082-07	DIODE KDS121-RTK			
D22	8-719-082-08	DIODE KDZ3.3V-RTK			
D23	8-719-988-61	DIODE 1SS355TE-17			
D24	8-719-082-21	DIODE KDS112-RTK			
		< FERRITE BEAD >			
FB4	1-469-701-21	FERRITE, EMI (SMD) (1608)			
FB5	1-469-701-21	FERRITE, EMI (SMD) (1608)			

TUNER

Ref. No.	Part No.	Description			Remark
		< IC >			
IC1	6-700-512-01	IC TA2149BN			
IC2	8-759-483-40	IC LC72137M-TLM-E			
		< SHORT >			
JC1	1-216-864-11	SHORT CHIP	0		
JC2	1-216-864-11	SHORT CHIP	0		
JC3	1-216-864-11	SHORT CHIP	0		
JC4	1-216-864-11	SHORT CHIP	0		
JC5	1-216-864-11	SHORT CHIP	0		
JC6	1-216-864-11	SHORT CHIP	0		
JC7	1-216-864-11	SHORT CHIP	0		
JC8	1-216-864-11	SHORT CHIP	0		
JC9	1-216-864-11	SHORT CHIP	0		
JC10	1-216-864-11	SHORT CHIP	0		
JC12	1-216-864-11	SHORT CHIP	0		
		< COIL >			
L1	1-419-856-11	COIL, AIR-CORE			
L2	1-419-857-11	COIL, AIR-CORE			
L3	1-419-854-11	COIL, AIR-CORE			
L4	1-419-855-11	COIL, AIR-CORE			
L5	1-754-117-12	ANTENNA, FERRITE-ROD (MW)			
L6	1-411-234-21	COIL, AM OSC			
L11	1-410-509-11	INDUCTOR	10uH		
L12	1-410-509-11	INDUCTOR	10uH		
L13	1-410-509-11	INDUCTOR	10uH		
L14	1-410-509-11	INDUCTOR	10uH		
L15	1-410-509-11	INDUCTOR	10uH		
L16	1-410-501-11	INDUCTOR	2.2uH		
L17	1-410-509-11	INDUCTOR	10uH		
L31	1-410-509-11	INDUCTOR	10uH		
		< TRANSISTOR >			
Q11	8-729-054-02	TRANSISTOR	KRA302-RTK		
Q12	8-729-054-02	TRANSISTOR	KRA302-RTK		
Q13	8-729-055-18	TRANSISTOR	2N3906U-RTK		
Q14	8-729-055-16	TRANSISTOR	KTC4082-RTK		
		< RESISTOR >			
R1	1-216-817-11	METAL CHIP	470	5%	1/10W
R2	1-216-815-11	METAL CHIP	330	5%	1/10W
R3	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5	1-216-817-11	METAL CHIP	470	5%	1/10W
R6	1-216-809-11	METAL CHIP	100	5%	1/10W
R11	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R12	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R15	1-216-819-11	METAL CHIP	680	5%	1/10W
R16	1-216-821-11	METAL CHIP	1K	5%	1/10W
R17	1-216-845-11	METAL CHIP	100K	5%	1/10W
R18	1-216-819-11	METAL CHIP	680	5%	1/10W
R19	1-216-821-11	METAL CHIP	1K	5%	1/10W
R20	1-216-833-11	METAL CHIP	10K	5%	1/10W
R22	1-216-864-11	SHORT CHIP	0		
R23	1-216-817-11	METAL CHIP	470	5%	1/10W
R24	1-216-835-11	METAL CHIP	15K	5%	1/10W
R25	1-216-864-11	SHORT CHIP	0		
R26	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R31	1-216-841-11	METAL CHIP	47K	5%	1/10W
R33	1-216-849-11	METAL CHIP	220K	5%	1/10W
R37	1-216-817-11	METAL CHIP	470	5%	1/10W
R41	1-216-845-11	METAL CHIP	100K	5%	1/10W
R42	1-216-845-11	METAL CHIP	100K	5%	1/10W
R51	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R52	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R53	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R54	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R55	1-216-821-11	METAL CHIP	1K	5%	1/10W
R58	1-216-821-11	METAL CHIP	1K	5%	1/10W
R59	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R61	1-216-813-11	METAL CHIP	220	5%	1/10W
R62	1-216-833-11	METAL CHIP	10K	5%	1/10W
R63	1-216-819-11	METAL CHIP	680	5%	1/10W
R64	1-216-833-11	METAL CHIP	10K	5%	1/10W
R66	1-216-821-11	METAL CHIP	1K	5%	1/10W
R67	1-216-845-11	METAL CHIP	100K	5%	1/10W
R68	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R69	1-216-833-11	METAL CHIP	10K	5%	1/10W
R70	1-216-837-11	METAL CHIP	22K	5%	1/10W
R71	1-216-809-11	METAL CHIP	100	5%	1/10W
R72	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R73	1-216-845-11	METAL CHIP	100K	5%	1/10W
R74	1-216-821-11	METAL CHIP	1K	5%	1/10W
R75	1-216-833-11	METAL CHIP	10K	5%	1/10W
R79	1-216-864-11	SHORT CHIP	0		
R81	1-216-809-11	METAL CHIP	100	5%	1/10W
R82	1-216-809-11	METAL CHIP	100	5%	1/10W
R84	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
		< TRANSFORMER >			
T1	1-433-741-11	TRANSFORMER, IF			
T2	1-419-465-11	COIL (DET)			
		< VIBRATOR >			
X61	1-781-592-11	VIBRATOR, CRYSTAL (75kHz)			
**********					
		MISCELLANEOUS			
		**********			
53	1-829-096-11	CABLE, FLEXIBLE FLAT (17 CORE)			
55	1-829-095-11	CABLE, FLEXIBLE FLAT (16 CORE)			
⚠108	1-828-104-11	CORD, POWER			
207	1-829-094-11	CABLE, FLEXIBLE FLAT (20 CORE)			
209	1-829-093-11	CABLE, FLEXIBLE FLAT (14 CORE)			
* 401	A-4902-666-A	MD ASSY (900AAA-RP)			
		(Including M701, M702)			
⚠406	8-820-137-02	OPTICAL PICK-UP KSS-900A/C2RP			
⚠F901	1-533-450-12	FUSE, GLASS TUBE (DIA. 5) (2.5A/125V)			
M301	1-763-183-12	MOTOR, DC (CD TRAY OPEN/CLOSE)			
MIC1	1-542-260-61	MICROPHONE, ELECTRET CONDENSER			
SP101	1-825-799-11	SPEAKER (7.7cm)			
SP201	1-825-799-11	SPEAKER (7.7cm)			
⚠T901	1-443-227-11	TRANSFORMER, POWER			
**********					

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
		ACCESSORIES	
		**********	
	3-009-707-01	SPACER	
	3-011-879-01	SCREW (M5X80), +B (MOUNTING SCREW)	
	3-238-070-21	LID, BATTERY CASE (for RM-CD543A)	
	3-265-482-11	MANUAL, INSTRUCTION (ENGLISH)	
	3-265-573-01	CARD BOARD	
	A-3013-992-A	REMOTE CONTROL RM-CD543A/SC (SET)	

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2004.02	New
1.1	2005.07	Change of Part for Ref. No. IC651 on LCD board (SPM-05066)
1.2	2005.10	Addition of Ref. No. 112 on EXPLODED VIEWS (SPM-05161)